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A
HISTORY OF COMMERCE

BY

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IN YALE UNIVERSITY

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MADE IN THE UNITED STATES

111

To
E. L. D.

PREFACE

The year 1914 marks one of the great turning points in history. I have accordingly revised the part of this book covering the recent period to close the narrative at that date, and have added another part, covering the history of commerce in the war and in the two or three years of peace immediately following. The commerce of the great nations of the world has departed since 1914 far from its accustomed paths and forms. In my attempt to make intelligible the commercial changes of the time I have had to take account of matters in public finance, currency and foreign exchange which are usually treated apart from the history of international trade. I have thought it better, by touching on these outside subjects, to show the reasons for the course which commerce has followed, rather than to omit the reasons because they are hard for the student of the history of commerce to understand.

CLIVE DAY

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A HISTORY OF COMMERCE

PART I. — ANCIENT COMMERCE

CHAPTER I

GENERAL CONDITIONS

1. The purposes of commerce. — The reader will follow more intelligently the history of commerce if he will stop a moment at the start to consider the purposes of commerce and the difficulties which must be overcome if it is to be successfully carried on.

As to the purposes we may be brief. The largest part of the time and energy of the ordinary man is consumed in getting the material things which furnish him with the means of subsistence and of culture. We are accustomed to think of the farmer and the manufacturer as charged especially with supplying our material wants, but a little reflection will show that the work of these classes, without the aid of another class, would be of little use to us. The food and clothing and tools and other desirable articles which they produce are valuable only when they are put into the hands of a man who wants them and can use them. Articles which we all should pronounce desirable, the ripe fruit of the farmer and the finished product of the manufacturer, have still only the possibility of good in them; and this possibility is realized only when they are put in the place where they are wanted at the time when they are wanted. It is the business of the merchant to attend to the proper distribution of wares, in place and time. He does not change the form of things, like the farmer or the manufacturer, but he is as truly a producer as they are.

Ice may be manufactured in summer by the ammonia process, or it may be saved from the preceding winter, or it may be brought in summer from Greenland. To the consumer it makes no difference which one of these methods is employed; he wants his ice in summer, and the trader who satisfies his wants by saving or transporting the ice is as useful a member of society as the manufacturer who makes the ice.

2. Obstacles to the development of commerce. (1) **Personal.** — Great as are the advantages of commerce, ages of progress were required to give it the position which it holds in the modern world. It has had to make its way against innumerable obstacles; and to some of these obstacles the reader is asked now to give his attention.

There is, first of all, the difficulty which we may term personal. A man now accepts trade as a matter of course. He devotes himself to some special line of production, the growing of wheat or the making of shoes, feeling sure that he can exchange his surplus for whatever else he wants, and making his exchanges without hesitation. An uncivilized man, however, is accustomed to satisfy his wants in only two ways, by his own labor in production or by robbing another man. He is suspicious of any offer to exchange wares, and is unwilling to apply himself to any special line of production that would make him dependent on trade. The ignorance and suspicions of men were in early times the greatest hindrances to the rise of commerce, as they are still in backward portions of the world; it has required generations of experience to teach men wants for things which they did not themselves produce, and to teach them to satisfy these wants by exchange. Commerce took on definite proportions and became of considerable importance only when a special class of traders and merchants arose, who made it their business to study wants, to inspire new ones, and to provide the means of satisfying them.

3. (2) **Physical obstacles.** — Another difficulty in the pursuit of commerce, which we may term physical, appears in the exchange of articles which are produced at some distance from each other, so that they need to be transported by land or sea. A farmer who sets out for the city with a load of grain will have to count carefully the cost of getting it to market. Assume that he feeds himself and his horses from his wagon-load; evidently, if the road is long, or so bad that progress is slow and many horses are necessary, he may find all the wheat consumed on the journey before he has secured a purchaser. In this aspect the facilities for transportation, whether by land or water, by pack-animal, cart, canal boat or steamer, are of great importance. It has been estimated that a human burden bearer would require more than a day and a half to move a ton of goods a mile; a strong pack-horse can carry three hundredweight a considerable number of miles in a day; while on first-rate level roads a horse can drag a ton even further. Another factor in this question is the character of the ware. A farmer who could not afford to bring wheat to market might still find it profitable to bring butter, which has much greater value in the same bulk, so that the profits on a wagon-load might pay the expenses of the journey. Gold can be exported from the interior of Alaska under difficulties which would make the transportation of any other product impossible.

4. (3) **Risk of loss at the hand of public enemies or robbers.** — The carrier of merchandise has to face not only physical difficulties, but also dangers from another source. From time to time we read in the modern newspaper of high rates charged for war insurance, when ship or cargo may be captured and confiscated by an enemy on the sea. The merchant must count his insurance charges before he can figure out his profits. This illustration will make clear the character of one of the obstacles to commerce, which we may term military, by some stretching of the current meaning of the word. It gives, however, no idea of the extent of this danger in earlier times, when not only were wars far more common, but when even in times of peace the state was so weak that the merchant, in

every mile of his progress, was exposed to attack by highwaymen on land and by pirates at sea. Either the merchant must bear his own risks, or pay somebody to protect him against them. In either case the result would be the same, the necessity of charging higher prices for the wares, and so making sales less attractive and less common.

5. (4) **Political restrictions.** — Still another element can be distinguished in history, which seems often to be an obstacle to the development of commerce. This element may be termed the political. A man is not only a producer and consumer; he is also, whether he is conscious of it or not, a member of the state, and subject to some kind of political organization which restrains and directs him in his economic life. His efforts to further his own interests are restricted by laws meant to protect the interests of the people as a whole against the selfishness of individuals. A merchant in the United States who proposes to import some ware from another country will find that he must pay not only the natural transportation and insurance charges, but possibly also a customs duty in addition, that would make the exchange unprofitable. If he proposed to import a foreign ship for use in the American coasting trade he would find that he is absolutely prohibited from doing this, no matter how much he might be willing to pay as duty.

These restraints are imposed nowadays, not because the government assumes that individuals cannot take care of themselves and is afraid that they may lose money by making purchases abroad, but because it thinks that they may hurt the interests of producers in the home market, whom it proposes to protect. We shall find that governments in earlier times restrained the flow of commerce to protect not only producers but also consumers and even the merchants themselves; and that regulations were imposed, of such variety and such strictness, that they made a very important element in the commercial life of peoples. The church as well as the state interfered with the course of exchange in the Middle Ages, and thought it necessary to safeguard public morals by many restrictions which have since disappeared.

QUESTIONS AND TOPICS

1. Consider some articles of your clothing; try to ascertain from what different sources the materials were gathered by the merchant for the manufacturer, and how the finished product reached you. Do the like for a common implement, a lead-pencil or pocket knife, or an article of furniture. What countries were drawn upon to supply the food and setting of your breakfast table? [Compare The cost of a dinner, Outlook, March 13, 1897, quoted in Clow's Introduction to the Study of Commerce, Silver, Burdett & Co., 193–194.]

2. What articles would you have to do without if your supply were limited to the things produced within a radius of 10 miles of your home? Within a radius of 100? Within a radius of 1,000?

3. Ice was given as an example of a ware which varies greatly at different times. Are all wares subject to such variation? [If you find what seems to be an exception, verify it by the wholesale prices quoted in newspapers.]

4. What is the use of grain elevators and wheat speculators?

5. Can you detect any difference between city people and country people in making a bargain?

6. What has been the attitude of the North American Indians to trade? With what wares have traders had to tempt them?

7. Arrange the following articles in the degree of their transportability, *i.e.*, according to the distance which they may be carried with profit: raw cotton, coal, potatoes, silver, building stone, gold, wheat, cotton cloth, diamonds, hay, coffee, salt, silk ribbons, copper. [The price per pound of many of these wares is given in the newspaper.]

8. Give an instance of articles wasting, unused for lack of good wagon-roads; for lack of railroads.

9. In what regions has piracy persisted to recent times? [Read some description of Borneo or of the Philippine Islands, or a description of Chinese junk trading and Chinese river life.]

10. What effect did the Civil War have on American commerce? [See reference in chap. 51.]

11. In what regions of the world is land trade still unsafe?

12. To what restrictions, if any, does an American merchant have to submit who desires to trade in one of the following wares: cigars, gunpowder, whisky, lottery tickets, imported iron, cigarettes, improper literature?

13. Government restrictions now are due usually to one of three

objects: (1) collection of revenue, (2) protection of other producers, (3) protection of the consumer and the public. Classify the wares above according to the object of the legislation.

14. Read Bourne, Romance of trade, 96–137, on the close relations of politics and commerce.

BIBLIOGRAPHY

The reader will find at the end of most of the following chapters titles of books suggested for further reading and study; titles of books that are warmly recommended are marked by an asterisk, titles that are particularly noteworthy are marked by two asterisks. In all cases the references are restricted to books available in English. The prices given are in most cases those at which the book was sold before the war, and are retained as giving some indication of the relative expense involved in the purchase of the books; prices have changed so much during and after the war that an attempt to list current prices appears impracticable.

Bibliography. — The best available bibliography of English books on the history of commerce is Sonnenschein's Bibliography of social and political economy, London, 1897, reprinted from The Best Books and The Reader's Guide. Useful bibliographical information will be found also in Palgrave's Dictionary, and in the Subject Index of the British Museum Library, which has been published at brief intervals since 1902, and which lists all the new books added to the Library. The American Economic Review, established in 1911, is a quarterly publication which has devoted particular attention to the bibliography of economic subjects, and which should be consulted for the announcement of new books, the summary of articles in periodicals, and the appreciation of important works in book reviews. The American Library Association Catalogue, which has appeared in various editions, gives full bibliographical information about popular books which are on sale in the American market.

In default of a general bibliography the student must refer to books describing conditions in England. The most complete and scholarly bibliography is that given by Cunningham, in appendixes to his Growth, etc. References which to most students will be more useful are given in Traill's Social England. Both these sources cover the whole period, into the nineteenth century. For the medieval period the general student has a bibliography approaching near to perfection by Charles Gross, Sources and literature of English history, London and N. Y., 1900, and the student of the history of commerce will find many references in the Select bibliography of English mediaeval economic history, edited by Hubert Hall, London, 1914. A revision of C. K. Adams, Manual of historical literature, which has been undertaken by the American Historical Association will be of great value when completed.

Manuals. — Cheesman A. Herrick, ** History of Commerce and industry, N. Y., 1917, resembles in plan the present book. Bibliographies are appended to the different chapters. Two English manuals on the history of commerce, H. de B. Gibbins, * History of commerce in Europe, London, Macmillan, 1891, and J. R. V. Marchant, Commercial history, London, Pitman [about 1901], suffer from the attempt to compress an immense number of facts into a small compass. William C. Webster, * General history of commerce, Boston, Ginn, 1903, $1.40, marks a decided advance in the selection and presentation of material, but is lacking in scholarship; the present writer discusses this book in detail in Yale Review, Feb., 1904, vol. 12, p. 436 ff. It has scattered bibliographies, unclassified. George W. Sanford, * Outlines of the history of commerce, Chicago, Powers & Lyons, 1902, occupies a place by itself, and should be of decided value in supplementing any manual. It gives topical outlines of the different chapters in the history of commerce, suggestions and references for reading, and skeleton maps for the student to fill in. It seeks to give no information directly.

General Works. — Of the general works on the history of commerce most are old and out of print. Of these only one need be noted here, Lindsay's * History, of which the first volume covers ancient and medieval times. This will be of value to any school library, if it can be procured. John Yeats, Growth and vicissitudes of commerce, Boston, Boyle, covers the whole subject, from ancient to recent times, in a volume of about 400 pages; it was compiled about 1870, from other compilations, and is not to be trusted entirely, but is about the only book of its kind now in the market. Bourne's * Romance of trade and Oxley's * Romance of commerce answer well to the description Bourne gives of his book, "an interesting gossip-book about commerce"; both books contain readable discussions of various topics in the history of commerce, and references will be given to them hereafter. Morris, History of colonization, 2 vols., N. Y. Macmillan, 1900, would be a valuable book to the teacher if it were well done, as it covers the history of colonization and commerce from earliest times to the present. It is, however, so badly constructed and so unreliable that it cannot be recommended. See the reviews in The Nation, Yale Review, American Historical Review. A far better book on the subject is A. G. Keller, ** Colonization, N. Y. 1908.

The book which I recommend most strongly to teachers who are restricted in their choice is Cunningham's ** Growth; it will enable the teacher to dispense with many other books, and no other book could be substituted for it. Ashley's * Economic history, always desirable, is less necessary for the purposes in view here. Ashley's ** Economic Organization of England, London, 1914, is an admirable survey of English economic history and is well suited to serve as collateral reading, but has little on the history of commerce proper. If Cunningham's large work is provided, the teacher and student can afford to neglect the smaller manuals on English economic history by Cunningham and MacArthur, Warner, Price, Cheyney (revised edition, 1920), Usher, and others. Frederic A. Ogg * Economic development of modern Europe, N. Y., 1917, deserves separate mention since it embraces not only England, but also the more important countries on the Continent; it covers the earlier periods briefly, but treats the nineteenth century fully, and has extensive bibliographies.

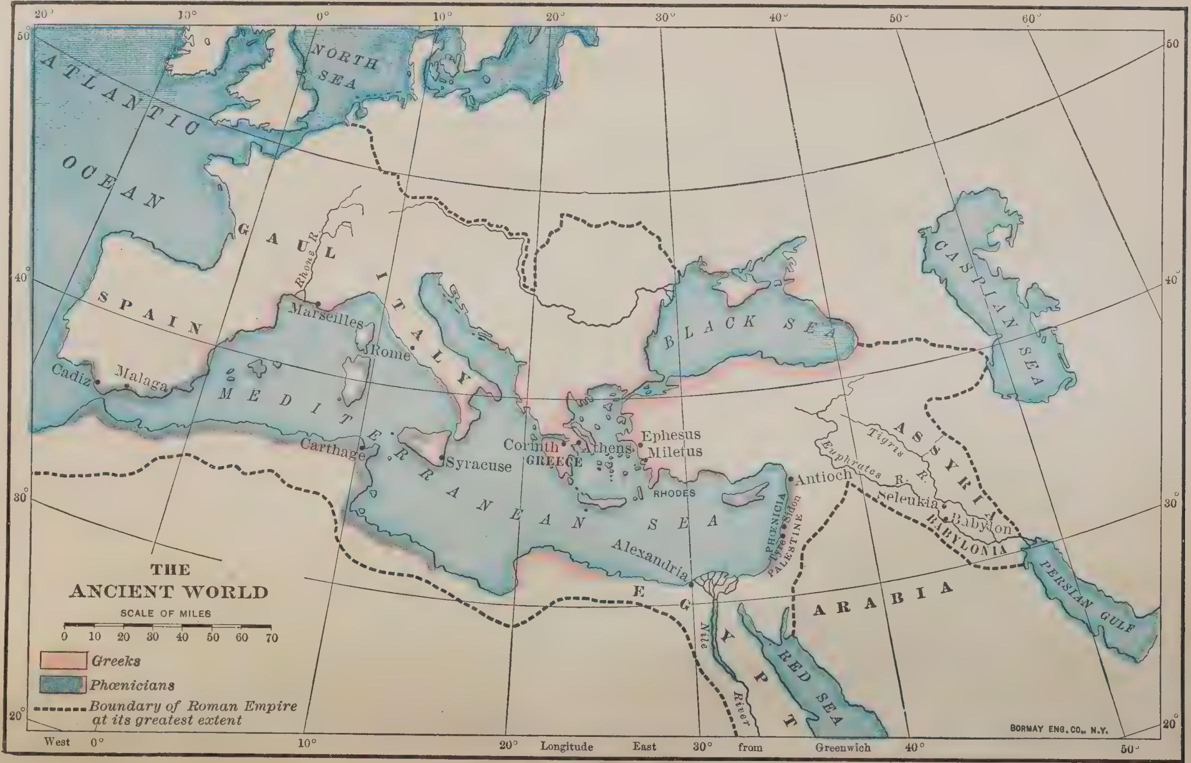
Many of the general histories of Europe and England can be used to advantage by the teacher or student of the history of commerce. The only work, however, which can receive special mention here is Traill's * Social England; chapters contributed by various writers cover the history of commerce from earliest times to 1885.

MAPS. — The student must look to the general historical atlas for help in studying the history of commerce. He will find that the more elaborate atlases are hardly worth the extra expense for his purposes.

William R. Shepherd, **Historical Atlas, N. Y., Holt, revised ed. 1921, includes considerable economic material, is provided with a full index of places, and will serve all ordinary needs.

The outline maps of the McKinley Publishing Company (Philadelphia), and the Rand McNally Co., will be found valuable for the use both of teacher and class.

In many cases a modern atlas is more desirable than a historical atlas. Longmans' ** School atlas, N. Y., 1901, is an admirable work, which should be in the hands of every student, and the Century ** Atlas is indispensable for reference purposes.


THE ANCIENT WORLD
SCALE OF MILES
0 10 20 30 40 50 60 70
Greeks
Phœnicians
Boundary of Roman Empire at its greatest extent
ATLANTIC OCEAN
NORTH SEA
GAUL
SPAIN
ITALY
GREECE
MEDITERRANEAN SEA
BLACK SEA
CASPIAN SEA
ASSYRIA
BABYLONIA
ARABIA
EGYPT
RED SEA
PERSIAN GULF
PHŒNICIA
PALESTINE
RHODES
Rhone R.
Tigris R.
Euphrates R.
Nile River
Cadiz
Malaga
Marseilles
Rome
Carthage
Syracuse
Corinth
Athens
Ephesus
Miletus
Alexandria
Tyre
Sidon
Antioch
Seleukia
Babylon
West 0° 10° 20° Longitude East 30° from Greenwich 40° 50°
20° 10° 0° 10° 20° 30° 40° 50° 60°
50 40 30 20
BORMAY ENG. CO., N.Y.

CHAPTER II

ORIENTAL PERIOD

6. Prehistoric commerce. Ancient Egypt. — The origins of commerce are lost in obscurity. Before people are sufficiently civilized to leave written records of their doings they engage in trade; we can observe this among savage tribes at the present day, and we know that it held true of the past, from finding among the traces of primitive man ornaments and weapons far from the places where they were made. Such evidences, interesting as they are, belong to the prehistoric period, and this sketch of early commerce must begin with the peoples who had acquired the art of writing and have left us records from which we can gain some idea of their history.

First among these peoples, in point of time, were the Egyptians. Three thousand years before Christ, at the time when the great pyramids were built, this people had already attained a developed civilization, which, in the opinion of modern scholars, can be traced back even thousands of years more. The Egyptians, however, were not a commercial people. Their main resource was agriculture, and though they developed some of the industrial arts to great efficiency they used the products for direct consumption rather than for trade. Their country, a strip of the Nile valley over five hundred miles long, and but a few miles wide, was so much alike in its different parts that it offered little inducement to internal exchange over great distances; while its isolation by deserts was a bar to the growth of foreign commerce. The sea, in this early period, was a hindrance, rather than a help, to communication.

7. Rise of Egyptian commerce; characteristic wares. —

Egypt never became a commercial country so long as it remained under its native rulers. With the period known as the New Empire, however, beginning about 1600 B.C., commerce at least became more important than it had been before. Regular communication was established with Asia, and caravans brought to the country the products of Phœnicia, Syria, and the Red Sea district. Before the eyes of Joseph and his brethren "behold, a company of Ishmaelites came from Gilead with their camels bearing spicery and balm and myrrh, going to carry it down to Egypt"; to this caravan Joseph was sold as a slave. The wares named here were characteristic imports of Egypt; among others were precious woods, ivory, gold, wine, and oil. Among the exports of the country were grain, linen, and manufactured wares like weapons, rings, and chains. Even to a late period trade was carried on by barter, the use of coins being rare, and many of the imports came as tribute, for which the Egyptians needed to make no return.

8. Development of Egyptian commerce in a later period. — Only in the last period of Egyptian independence, a few centuries before the country was conquered by Alexander, did commerce bind it closely to other portions of the ancient world. The government, which formerly had discouraged trade, now permitted and encouraged it; Greek merchants came in considerable numbers to Egypt; and an active commerce sprang up. It is said that Necho, the king who ruled about 600 B.C., sent out Phœnician sailors to attempt the circumnavigation of Africa; and the same king took up the work of cutting a canal across the isthmus of Suez which was completed shortly afterward. The canal was allowed to fill up with sand, but was reopened later, and its course may be distinctly traced, it is said, along the route of the modern canal.

9. Rise of commerce in the Mesopotamian Valley. — The district northwest of the Persian Gulf, centering in the river valleys of the Tigris and Euphrates, offered opportunities for the rise of civilization which led to the establishment of settled governments while Egypt was still living secluded from the rest of the world. This district was rich in agricultural products, but lacked the metals, some of the building materials, and other of the raw materials of industry. Though it was bordered in part by deserts, communication with other districts was far easier than in the case of Egypt; and commerce with other countries early acquired an importance here which Egyptian commerce attained only in the last period of the country's history. Ancient Babylon, which rose to importance some time after 3000 B.C., under a Semitic people (with a language akin to that of the Jews), was a market-place for wares brought not only from the South (Arabia) and West (Syria), but also from the East (Iran, the later Persia). Clay tablets, used like modern paper for the preservation of records, have been discovered and deciphered in modern times, and show an active trade in the precious metals, grain, wool, building materials, etc.

10. Development of commerce under the Assyrian and Persian empires. — Military expeditions extended the commercial relations of the people of this district; and the conquests of an Assyrian, who founded a great empire about 745 B.C., were guided in part by commercial considerations, Babylon, Armenia, Syria, and parts of Iran and Palestine, were brought under one rule; peoples on the frontiers were held in check, and order was fairly well maintained within; so that merchants could traverse the different parts of the empire, and meet at its capital, Nineveh, to exchange their wares. The Assyrian empire was made by the sword, and it fell by the sword after a brief duration; but its place was taken by succeeding states, and commerce continued to grow. The Persian empire, which enjoyed its full power for about two hundred years, until its destruction by Alexander in 330 B.C., included an area more than half that of modern Europe; it stretched from the Mediterranean on the West to the Indus on the East, from the Indian Ocean and the Persian Gulf to the Black and Caspian seas. Within these boundaries lay some of the richest regions of the ancient world, the products of which could now be exchanged without passing from under the protection of the Great King.

11. Relative insignificance of the commerce of the ancient empires. The Jews. The Phœnicians. — In the Oriental states which we have hitherto considered, commerce never grew to a position of decisive importance in the national life, however great it may seem when we compare it with its meager beginnings. It served mainly the needs of luxury, and left untouched the economic position of the mass of the people. If we seek in the ancient Orient a people whose very existence depended on trade we must look further. We do not find the Jews to have been such a people, though we are accustomed nowadays to think of them as devoted largely to the pursuit of trade. The descriptions of the Bible show that they lived mainly a pastoral and agricultural life; and down to the time of the Roman Empire they counted for little in the world of commerce. A truly commercial people we do find, however, in near neighbors of the Jews, the Phœnicians, who inhabited a strip of land on the coast of Syria and Palestine, scarcely ten miles wide in most places and little over a hundred miles long. They could gain a scanty food supply from the level ground, and had timber in abundance on the mountains that separated them from the interior, but had to look to trade with other peoples for the means of growth which their home denied them.

12. Commerce of the Phœnicians. Beginnings of sea-trade. — From raw materials which were in many cases procured from other countries they manufactured products which found a market throughout the ancient world. Their cloths and glass were celebrated; they exported large amounts of metal ware; and they had a monopoly of the purple dye extracted from a species of shell-fish, which was highly prized throughout this period. These wares were but a few of those in which they regularly traded; the reader who would have a more detailed account of the wares of Phœnician commerce, especially the imports, is advised to study the description in the Bible. They maintained an active exchange with peoples to the South, East, and North of them by caravan routes, while they were the first people of antiquity to secure such mastery over the sea that it could be made the medium of regular and extensive transportation. The beginning of these sea voyages is lost in the obscurity of the past. We know that they were highly developed by 1500 B.C., when Sidon was the leading Phœnician city, and that they did not cease to extend when the primacy of the Phœnician cities passed to Tyre. The Phœnicians taught the art of navigation to the ancient world. Their ships were long the accepted models of construction, and the Greeks learned from them to direct their course at night by the North, or, as the Greeks called it, the Phœnician star.

13. Development of sea-trade; wares of Phœnician commerce. — Beginning, presumably, with fishing and short coasting trips, and reluctant always to venture out in the stormy season, they had reached the islands of Cyprus and Rhodes, and had established regular commerce with Greece in the heroic age of Greek history, say before 1000 B.C. From this point their progress was rapid, and soon they had traversed the whole Mediterranean, and passed outside it into the Atlantic. The means of cheap transportation which they controlled gave them an immense economic advantage. We may accept as a product of the imagination the story that on their arrival in Spain they found silver so plentiful that they not only filled their ships but made their utensils, even their anchors, from it; still the story shadows forth a truth. They found wares in some districts cheap and begging a market because of their abundance, which were rare and highly prized elsewhere; and they could make great profits by exchanging wares so as to put each where it was most wanted. From the island which we now call England they procured tin, which is a very rare metal in Europe, and which was especially desired as a component of the important alloy bronze. They got copper in Cyprus and Spain, also silver and iron in Spain, and gold and ivory in Africa. They carried westward the wares of the Orient (cf. our words cinnamon, cassia, hyssop, cumin, manna, all from Hebrew forms), and manufactures, which not only gratified the momentary needs of Europeans but served also as models for imitation.

14. Establishment of colonies by the Phœnicians. Carthage. — The Phœnicians are noteworthy not only as the greatest merchants and the first navigators of the ancient world; they were the leaders also in the founding of colonies. At points important for commercial or naval reasons they established stations which enabled them to trade in security with the natives and to control the sea. Gades, for instance (the modern Cadiz), near the straits of Gibraltar, was a rallying-point from which the Carthaginians extended their voyages to the tin islands in the North, and far down the Atlantic coast of Africa on the South. Similar stations were established on many of the Mediterranean islands (Malta, Sicily, Sardinia, Balearics); and one founded on the north coast of Africa, Carthage (near the site of modern Tunis), grew to especial importance. The power of the Phœnicians declined, a few centuries after 1000 B.C., partly by reason of internal dissensions and the attacks of land-powers like Assyria, partly by reason of the commercial rivalry of the Greeks, who had risen to an independent position and cut the lines of communication between East and West. In this period Carthage fell heir to the Phœnician establishments in the western Mediterranean, and maintained its power and policy on substantially similar lines until it received its great defeats at the hands of Rome.

QUESTIONS AND TOPICS

1. What evidences of prehistoric commerce are given by Indian arrow-heads, wampum, Indian ornaments, or the relics of the mound-builders?

2. What modern countries have the strip-form of Egypt? [See a map of South America.]

3. Are there any modern countries like Egypt in the uniformity of

their conditions and products, diminishing the stimulus to internal trade? [Study, for example, conditions in Alaska, Nevada, or Australia.]

4. Are any of the exports of ancient Egypt still characteristic wares of the country? [See the Statesman's Year-Book, index under words Egypt, commerce.]

5. What can you infer as to the security of trade from the fact that it was carried on by caravans, bands of merchants?

6. What physical barriers obstructed Egyptian commerce? [See map 33 of Longmans' School atlas, noting the deserts and the cataracts of the Nile.]

7. Write an essay on the economic conditions of Egypt, from references to that country in the Bible.

8. What countries of the modern world fill the space occupied by the ancient empires of the East? What commerce do they carry on? [See Statesman's Year-Book.]

9. Can you suggest any reasons why the commerce of these regions seems now much less important than in ancient times?

10. Write an essay on the economic conditions of later Babylon, from descriptions in the Bible. [See Babylon, in the subject-index of the Oxford Bible.]

11. Write an essay on the economic life of the Jews from the descriptions of the Bible.

12. Write a similar essay on the Phœnicians. [See Sidon and Tyre in the subject-index.]

13. Show the similiarity of conditions in Phœnicia and in Norway, forcing the inhabitants of both countries to the sea. [Study the physical characteristics of Norway in a geography, and note the history of the Vikings, and the importance of commerce and navigation in modern Norway.]

14. Write a report, from information to be got from the Encyclopædia Britannica, on one of the following subjects: —

(*a*) The commerce and manufactures of the Phœnicians. [See the index in the last volume of the ninth edition, under Phœnicians.]

(*b*) The manufacture and trade in glass in the ancient world. [See vol. 10, p. 647.]

(*c*) The Phœnician purple. [See the references under the word Purple, vol. 20, p. 116, and the index.]

(*d*) Early navigation. [See the index.]

15. Wares of Phœnician commerce. [Bible, Ezekiel, chap. 27.]

BIBLIOGRAPHY

Ancient Commerce. — The best available survey of the economic development of the ancient world is Cunningham's ** Western civilization in its economic aspects, vol. 1, Ancient times, Cambridge (N. Y.) Macmillan, 1898; this may be used for parallel reading throughout. On Egypt, Adolf Erman, Life in ancient Egypt, London, 1894, is interesting and reliable. Readers of English are fortunate also in having a translation of Holm's * History of Greece, N. Y., Macmillan, 1894, 4 vols.; it may be made to serve as a history of commerce in the Mediterranean down to the second century. The popular books on Alexander's conquests and their results, by Wheeler and Mahaffy, give, unfortunately, little attention to economic affairs. P. V. N. Myers, * History of Greece, Boston, Ginn, 1895, is a convenient manual for general reading. Alfred E. Zimmern, ** The Greek Commonwealth, revised ed., Oxford, 1915, is an interesting account of the economic and political factors in Athens of the fifth century.

On economic development in the Roman world the student has now available a good manual by Tenney Frank, ** An economic history of Rome, Baltimore, 1920. A detailed account of conditions in the provinces is provided by Mommsen's * Provinces of the Roman Empire, N. Y., Scribner, 1887, 2 vols., $6. The current Roman histories give a distorted idea of Roman commerce by viewing it from the capital.

MAPS. — In default of an atlas of the history of commerce students must seek the maps scattered through special works, or rely upon an ordinary historical atlas. Justus Perthes' * Atlas antiquus (about $.75) can be recommended for use in ancient history; it is admirably executed, and is provided with an index.

CHAPTER III

GREEK PERIOD

15. Greece, physical character and products. — The mention of the Greeks at the close of the last chapter introduces us to a people who were, for a time, the leading merchants of the Mediterranean. The peninsular part of Greece has an area less than that of the State of Maine, little more than half that of the State of New York. It is, however, most richly diversified geographically, and no country in the world of an equal area, it is said, presents so many islands, bays, peninsulas, and harbors. The coast line of this little country is longer than that of Spain. No point is more than a few miles from the coast, and there are few points on the coast from which an observer does not see an island. In the Greek sea, moreover, every island is in plain sight either of the mainland or of another island, and in the good season the winds are very regular. Favoring conditions such as these are of vast importance in the early days of navigation, when sailors faced real perils due to their inexperience, and perils of the imagination which were even greater. At home the Greeks inhabited a country which was not rich enough to support them without exertion, but was, on the other hand, not so poor as to force them to use all their ingenuity in finding the means of subsistence. They could easily produce a surplus of oil and wine, but found a deficiency of other products, especially grain and, in the early period, manufactured wares.

16. Rise of Greek commerce. Colonies. — Though it would be hard to conceive a better nursery for the growth of commerce than existed under the conditions here described, the Greeks, when we first get knowledge of them, about 1000 B.C., were not yet ready to take advantage of their opportunities. There was some commerce, it is true, but it lay entirely in the hands of the Phœnicians, who brought utensils and cloth and took away timber and metals. Little by little the Greeks rose to commercial prominence, and gained the place formerly held by the Phœnicians. A striking feature of this revolution was the Greek colonial movement, which covered some five hundred years, and ended about 600 B.C. Greek emigrants settled throughout the Ægean Sea and established themselves as a fringe on the coast of Asia Minor and about the Black Sea; in the West they chose by preference the shores of southern Italy and Sicily, but founded colonies as far as Malaga in modern Spain, and created a great commercial center on the site of modern Marseilles. The colonies kept up an active intercourse with the mother country, and Greek sailors and merchants ousted the Phœnicians from their commanding position. The Greeks at home began to produce wares for export, seeking customers not only among the colonists but in other markets also; they emancipated themselves from their former dependence on Oriental manufactures, and developed the clay, bronze, and woolen industries to a point not dreamed of before.

17. Rapid development in the fifth century, B.C. — In this, which may be termed the preparatory period of Greek commerce, the leadership rested with the Greek colonies in Asia; Miletos was the first of the Greek cities in commercial importance. The advance of the Persian kings about 500 broke the power of the Greek colonies in the East; at the same time the western colonies, especially Syracuse, grew rapidly in importance, and forced Carthage to recognize their supremacy in the northern Mediterranean. The mother country itself was, however, that part of the Greek world which showed the most striking gains. The successful resistance to the Persians was followed by a remarkable development not only in politics but in industry and commerce as well, and Greece now took for two centuries the position which England occupies in the modern world. The little island of Ægina (near Athens), rocky and sterile, supporting to-day but 6,000 inhabitants, became for a time the most important market of the Greek world; it amassed fabulous riches by a commerce penetrating all seas, aided by an artificial harbor and a strong war navy. Another great commercial city, destined to a longer career, was Corinth; this city was the natural medium of trade with the western colonies, not only because it offered an opportunity to reach them without rounding the dreaded promontory of the southern tip of Greece, but also because some of the leading colonies of the West were Corinthian or closely allied to the Corinthians.

18. Rise of Athens to leadership. Exports. — The city of Athens, which had developed rapidly in the century preceding the Persian wars, rose to the first place among the Greek cities in the century in which they occurred (500–400 B.C.). The Athenians broke the power of Ægina in armed conflict, and appropriated its commerce; the Athenian sea-port, the Piræus, became the leading commercial port of the Greek world, and remained so until the Macedonian period (about 300). Readers must be referred to one of the narrative histories of Greece for an account of the way in which Athens built up its empire in the Ægean Sea, and for the story of the varied fortunes of its political power. Even in times of defeat, when its war-navy was scattered and its leagues and alliances broken up, it was still able to control a large part of the trade of the Ægean and Black seas, and maintained an important commerce with the South and West. The favorable situation of the city, and the ability and energy of its navigators and business men, enabled it to conduct a large carrying trade for other peoples, and many of the exports were foreign wares which were merely transshipped in the Piræus. Of native wares it exported silver and coin, from the mines near the city, some natural products (oil, figs, honey, wool, marble) of comparatively slight importance, and especially manufactured wares, of which pottery was the chief.

19. Athenian imports and policy. — The chief import was wheat, on which Athens was then as dependent as England is now; the city had grown so great by trade that the surrounding country was unable to support it. The great granary of Athens was the level country north of the Black Sea, and the Athenians made extraordinary efforts to control the narrow entrance to the Black Sea, that they might assure their food supply. They were not entirely dependent on this source, however, and imported wheat also from Sicily, Egypt, Syria, and the mainland to the North. Among the other imports were ship-building materials, salt fish, slaves, raw materials for the Athenian manufacturers, and articles of luxury. The breadth of the Athenian trade is pictured in the statement of a contemporary: "What delicacies there are in Sicily, or Lower Italy, or Cyprus, or Egypt, or Lydia, or on the Pontus, or in Peloponnesus, or anywhere else, they all are brought to Athens by her control of the sea."

The commercial policy of the Athenians was framed with an eye especially to the interests of the consumer. What duties were levied were low, and had no leaning to "protection" in the modern sense. The export of articles especially desired (wheat, ship-building materials) was restricted in the hope of keeping up the home supply, and commercial advantages were granted or withheld with the idea of exercising political pressure on other states; but nothing like modern protectionism can be found in the commercial policy of this period.

20. Contrast of the ancient and modern world; effect of Macedonian and Roman conquests. — In the course of our narrative we are now approaching a point when a great change came over the ancient world. The isolation of the earlier states of antiquity is their most striking feature. Each one lives only unto itself. It rises in civilization and then declines, without sharing its gains and losses with other states. It may conquer and hold them for a time, it is true, but it rules them as foreign territory, with alien interests; and the great empires crumble as readily as they are made. This characteristic of ancient history is one of its main difficulties to the student, for it deprives him of any bond of connection between the peoples, and forces him to pass from one to another of them, until he feels lost in the complexity of the narrative.

The modern world, with its common fund of culture and its community of interests uniting different peoples, could arise from these conditions only after long centuries of struggle. The unity of the Christian faith was needed to confirm the union of peoples in a common civilization. The process of union begins, however, at the point which we have reached; the great conquests of Alexander of Macedon, and those of Rome, did much to break down the barriers between peoples, and to prepare them for the acceptance of a common civilization and a common religion. It is to be hoped that the student knows already something of the narrative of those conquests. We shall have to confine ourselves to the results as they appear in the history of commerce. Here the reader can merely be reminded that Alexander united the eastern world into an empire extending from Greece to India, a little before 300 B.C., and that the Romans began about 200 B.C. to extend their authority outside the Italian peninsula, and before the birth of Christ had subjected to it practically all the peoples whose history we have been studying.

21. Effect of Alexander's conquests on commerce; decline of Greece. — In appearance the empire of Alexander outlived its founder but a few years, and then dissolved. Alexander, however, was a civilizer as well as a conqueror; he endowed the East with a common fund of Greek culture; and however distinct or hostile the states might seem thereafter the peoples were united as they had never been before. Commerce took on a new aspect. Greece, which before had been at the center of the great commercial movements, was now left on the western edge. Greek merchants could for a time use their former commanding position to share in the great commercial development, but in the long run their struggle was hopeless. The most energetic Greeks left their home to settle in eastern countries which were richer, more populous, and closer to the great currents of trade. Corinth was the only city which managed to maintain and extend its trade. Athens declined rapidly in commercial importance; and grass grew and cows were pastured in the streets of other towns which had once been important markets.

22. Rise of great cities. — Some indication of the development of commerce, and of the rearrangement of its important centers, can be got from a study of the great cities of the ancient world. Before the time of Alexander there were only three cities of the Mediterranean with a population of over 100,000, Syracuse, Athens, Carthage; none of these had a population far above that figure. About 200 B.C., scarcely more than a century afterward, there were four cities with a population over 200,000, Alexandria, Seleukia, Antioch, Carthage; one city with a population far above 100,000, Syracuse; and of cities with a population about 100,000 there were Corinth, Rome, Rhodes, Ephesos, and possibly others. The names of some of these cities are already familiar to us. Carthage was enjoying its last century of commercial greatness, before Rome robbed it of its influence in the northern Mediterranean. Syracuse was the chief Greek colony of the West, destined also to fall under the Roman power just before 200. Other names, however, are entirely new to history, or first became of great importance at this time, and the best idea of the commerce of the period can be got by considering the reasons for their greatness.

23. Alexandria, Seleukia, Antioch. — Alexandria, as its name suggests, was founded by the Macedonian conqueror. It was situated on a tongue of land between a lagoon and the sea, near the most western of the mouths of the Nile. It had a double harbor, formed by the island Pharos, which has given the name for lighthouse in some of the modern languages (French, *phare*, Italian, *fáro*), as the most celebrated lighthouse of antiquity was erected there. Alexandria furnished the only good harbor for large vessels on the coast of Egypt; it had access to the Nile, tapping one of the great granaries of antiquity, and connected with the Red Sea through the canal that ran from the Nile to the Bitter Lakes. It was at the point where the sea-route from the far East reached the Mediterranean, and it became by right the greatest market and the largest city that the world had known.

Next to it in size and importance came two other cities, Seleukia and Antioch, which were founded even later than Alexandria. Seleukia, on the Tigris, took the place of the earlier Babylon and the later Bagdad; it was situated in a rich plain at the points where the routes from the Persian Gulf and the Persian highlands met on their way westward. Antioch was at the focus of the routes by which the trade with inner Asia was carried on. Situated at a point where the Euphrates approaches to within a few days' march of the coast, and where the valley of the Orontes offers the best means of reaching the sea from the interior, it had the full benefit of the revival of eastern commerce which followed the conquests of Alexander and the enlightened rule of his successors.

24. Rhodes. — Only one other city, Rhodes, deserves especial attention, and this not because of its size alone but also because it was so specifically a commercial city. The little island could offer but scanty products to commerce, but it enjoyed an exceptionally favorable position, where navigators from Egypt and Syria, avoiding the dangers of the open sea, would put in for shelter and to trade. Rhodes followed a far-sighted foreign policy, guided by the idea of securing the greatest freedom of trade; it policed the seas and repressed piracy with vigor; and established a code of mercantile law which was celebrated as a model and which invited dealings in its market. The Rhodians were skilful navigators, and developed the principles of commercial association to a point of high efficiency. It is little cause for wonder, therefore, that commerce flowed thither from all parts of the eastern Mediterranean and even from the Black Sea; that foreign merchants sent their sons there to learn the conduct of commerce; and that great riches were accumulated, of which one evidence was furnished by the many colossi, gigantic statues, about the city.

QUESTIONS AND TOPICS

1. Prove the statement in the text, regarding the Greek islands. Take a good map, measure off on the scale 25 miles, the distance at which hills of about 125 feet are visible (the Greek islands are mountainous and the air very clear), and show by what stepping-stones timid sailors could advance.

2. Study in detail the influence of the physical characteristics of Greece on the people and their history. [See Myers, chap. 1; Holm, vol. 1, chap. 2.]

3. Write a report on the evidences of early civilization and trade. [Holm, vol. 1, chap. 8.]

4. Write a report on the early commerce carried on by Phœnicians. [Holm, vol. 1, chap. 9.]

5. Make a careful study of the Greek colonial movement, noting, (*a*) the motives to colonization, (*b*) the extent of Greek colonies, (*c*) the relations with the mother-country, (*d*) the mode of life in the colonies, (*e*) the influence on the commercial development of the different parts of Greece. [Myers, chap. 5; Holm, vol. 1, chaps. 12, 13, 14, 21, 25.]

6. Write a report on the history of the Greek colonies of the West, especially Syracuse and its contest with Carthage. [Holm, vol. 1, chap. 25; vol. 2, chap. 6, 29; Freeman, Story of Sicily, N. Y., Putnam, 1892, $1.50.]

7. Study the growth of the sea-power and empire of Athens, indicating on a map the allied or subject cities. [Myers, chaps. 15, 16; Holm, vol. 2, esp. chap. 17.]

8. Contrast Athenian exports of this period with the exports of modern Greece. [Statesman's Year-Book.]

9. What is the leading port of modern Greece? [Same.]

10. Write an essay comparing the Athenian and the British empires, noting, (*a*) advantages of geographical position, (*b*) products of the home country, exports and imports, (*c*) naval power and naval stations, (*d*) policy to members of the empire, (*e*) commercial policy of the home country. [See Myers or Holm, and the chapters in this book on England; compare E. A. Freeman, Greater Greece and Greater Britain, London, 1886.]

11. Compare the imports of ancient and of modern Greece. [Statesman's Year-Book.]

12. Make a chart, naming on a horizontal line the leading states of antiquity, from Egypt to Rome, placing dates (3000, 1500, 1000, etc.) in a column at the left, and indicating changes in the history of each state in the appropriate place in its column.

13. Draw a map showing the extent of Alexander's conquests, and comparing the empire with earlier Oriental empires. [See the maps in Myers, and if no good historical atlas is available consult the maps in the Oxford Bible, teacher's edition.]

14. Study the influence of the Macedonian conquests on civilization and commerce. [Myers, chaps. 25, 26, 27; Holm, vol. 3, esp. chap. 27.]

15. Write a report on the economic decline of Greece after the Macedonian conquest. [Holm, vol. 4.]

16. Is England exposed to such a change in the currents of trade as furthered the decline of Greece?

17. Why do great cities rarely grow up without the aid of commerce? [The answer to this question is suggested in a later chapter, but the student should be able to work it out himself.]

18. Are there any exceptions? What is the commerce of Washington, D. C.? Is there any one of the cities named in this section which may have owed its size to something beside commerce?

19. Has there been any later period in which great cities have risen suddenly, as in this period after Alexander?

20. Write a commercial history of Carthage from the information to be got in a Roman history, or in the Encyclopædia Britannica. Write a commercial history of Syracuse in the Roman period, from the same sources.

21. Write a report on the commerce and civilization of one of the cities, using Holm, vol. 4, and the encyclopedia.

22. Endeavor to trace the later history of one of these cities, and to discover its population now, using the encyclopedia and a geographical gazetteer.

BIBLIOGRAPHY

See chapter ii.

CHAPTER IV

ROMAN PERIOD

25. The Roman state; Rome not a commercial city. — In entering on the period of Roman domination we need spend no time over the earlier history of the city which came to rule the world. The Romans were not a commercial people. Even in the last two centuries B.C., when Rome extended her sway over the eastern countries which have already been noticed, and subjected a large part of the West as well, Rome did not become a commercial center. The city grew to unparalleled size, it is true, and required immense imports of food to support the population. These imports came, however, as taxes and tribute to the conquerors. Rome supplied no exports of considerable amount, and built up no great carrying and forwarding trade such as would have made the city the center for the exchanges of other people. The service which the Romans gave to the world of their time, and for which they received such rich reward, was not economic but political in character; they were the greatest organizers and administrators of antiquity, and by their skill in the arts of war and government succeeded in living on the labor of subject peoples. They were not mere parasites. They earned all that they received by one great contribution, "pax Romana," Roman peace, which continued almost unbroken for centuries, and which furnished an opportunity for commercial development before unknown.

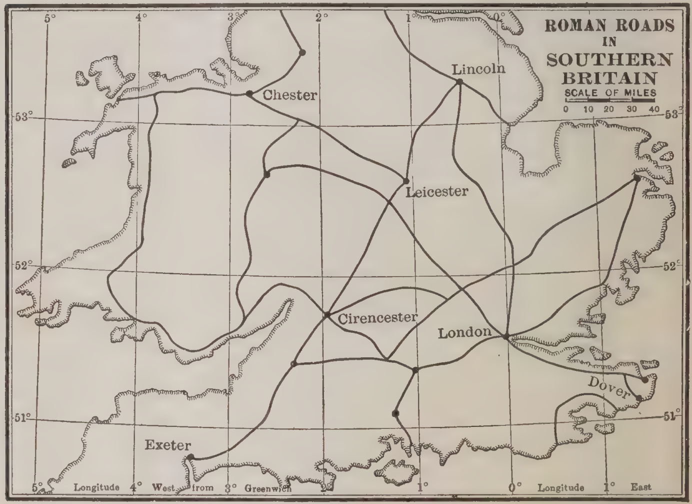
26. Development of commerce in the Roman East. — The study of commerce in the Roman period resolves itself, as suggested above, into a study of commerce in the different regions of which the great Roman state was composed. In the East commerce developed on the lines which have already been described; Alexandria and Antioch continued to be great markets for Oriental wares, coming now even from India and China; and Carthage remained an important outlet for the African trade. Asia Minor, northern Africa, and southeastern Europe reached the very pinnacle of their historical development in the Roman period; these countries have never since attained to anything like the prosperity they then enjoyed. We shall not have the time hereafter to notice the commerce of these regions in detail; the reader may take it for granted that merchants struggled strenuously to keep the place they had reached, and that decline came slowly, when it did come later.

Our attention must be directed hereafter mainly to the West. It was there that the most important states of modern Europe arose, and there that commerce grew up in its modern form. Our chief interest must be to know what progress the peoples of the West made under Roman rule, and how far commerce had developed among them.

27. Backward condition of the people of the West. — The peoples of the West were far behind those of the East in civilization. They have sometimes been compared to the American Indians, and though the comparison is inexact in detail and may easily mislead, it gives still a rough indication of their backwardness. They lived more from the products of their flocks and herds than from agriculture, when the Romans came in contact with them; they had practically no towns, and no considerable trade.

The five hundred years (roughly) of Roman rule made some striking changes in the Roman provinces of the West (modern Spain, France, England; not Germany or countries farther east). It kept the people in order, and gave them an opportunity to acquire the elements of a higher civilization. The fact that modern Spanish and French are based on Latin remains always a striking testimony to the Roman influence on the provincials.

28. Limited influence of Rome on the commercial development of the West. — It is easy, however, to overestimate the results of this influence, especially so far as regards economic progress. Rome gave her subject peoples of the West a chance at commercial development, but none had sought it and few were ready to profit by it. The Roman government constructed a system of military roads, models of their kind, which enabled troops and messengers to reach speedily the different provinces. Romans settled in the provinces as officials or private gentlemen, and Roman culture was acquired by the wealthy provincials; cities and large landed estates formed centers of industry and exchanged manufactured products for the raw materials of the surrounding districts.



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The course of some of the roads is uncertain, and the number would be increased or diminished according to the authority followed. The map gives, however, a fair picture of the Roman road system; it was, evidently, not so extensive as our modern railroad system.

The roads, however, seem to have served mainly Roman purposes, and the cities and culture depended mainly on

Roman influence for their support. The mass of the people remained passive, and advanced slowly. Most of them lived by agriculture in the country districts, producing the things necessary for their own subsistence and a small surplus for the Roman tax-gatherer; they received for their surplus no wares which would have formed the basis of commerce. However much Rome did to efface the differences of race, language, and national tradition, such differences remained to hinder commerce; and peoples were still separated by great distances and by serious physical barriers. The commercial development of the West, though it may seem great in comparison with conditions in the following period of disorder, was very limited even at the height of Roman power.

29. Decline of Roman power and of commerce in the West. — The time came soon when the provincials could no longer look to Rome for protection and stimulus. In the third century, A.D., the Roman government began to go to pieces. It lacked the force to repress internal revolts in the provinces, and to repel the inroads of barbarians on the frontiers. The process of decline had already proceeded far before the "Fall of Rome" (476), when even the shadow of authority passed from the Roman Emperor of the West. The remnants of Roman rule centered henceforth about the eastern capital, Constantinople. In the West barbarian chieftains established government of a kind on the fragments of the Roman state, but endeavored in vain to follow the models which the Romans had set them. The motives to commerce grew weaker as Roman culture disappeared, and the obstacles to commerce increased rapidly with the decline in public order. Brigandage and piracy became more profitable than honest industry; roads and bridges deteriorated; the course of rivers was obstructed. Even a great ruler like Charlemagne, who had himself crowned Emperor in 800, could do little to stay the process of decline, and weaker successors could do still less. The last remnants of the Roman organization seemed to have passed away, and the European world passed into the "Dark Ages."

QUESTIONS AND TOPICS

1. Endeavor to verify the statements in the text by studying the descriptions of Roman commerce in the current Roman histories. Ask the following questions of them. What wares, beside manuscript books and a few other items of no great importance, did the people of Rome produce for export? What wares beside food for the people and luxuries for the rich did they import?

2. Show how the taxes and tribute from conquered provinces can be regarded as war-insurance.

3. Write a report on the civilization and commerce of one of the provinces of the Roman Empire. [See Mommsen, Provinces, esp. vol. 1, chap. 7, Greek Europe; chap. 8, Asia Minor; vol. 2, chap. 12, Egypt; chap. 13, the African Provinces.]

4. Write a similar report on one of the provinces of the West. [Vol. 1, chap. 2, Spain; chap. 3, Gaul; chap. 4, Germany; chap. 5, Britain.]

5. Study the civilization of Roman Britain, distinguishing carefully the life of the upper (Roman) classes, and the life of the common people. What effect would this contrast of classes have on the extent and character of commerce in the Roman period? [Consult manuals of English history.]

6. Study the economic and political factors in the fall of Rome. [Cunningham, West. civ., vol. 1, p. 170 ff.; Adams, Civ., chap. 4.]

7. Compare the fall of Rome with the growth of political corruption in some modern cities, as affecting the prosperity of commerce.

BIBLIOGRAPHY

See chapter ii.

PART II.—MEDIEVAL COMMERCE

CHAPTER V

CONDITIONS ABOUT THE YEAR 1000

30. Political conditions affecting commerce; the modern system of government. — The reader who studies the history of commerce in the medieval period faces a system of government entirely different from that of modern times, which he must understand before he can appreciate the peculiar conditions of commerce then. We can illustrate the modern method of government by taking a country, say France, for an example. We wish to understand the relations of the capital, Paris, to other parts of the country, say the district around Bordeaux, in the southwest corner. An observer of this country will find that Paris and Bordeaux are united by different means of communication and transportation, telegraphs and posts, railroads, highways and canals, which are constantly employed in the service of government. On the path from the province to the capital go the reports of the officials who are in charge of the government of Bordeaux; and, if they fail in their duties, petitions and complaints from private citizens, asking relief, will take the same path. By this path, also, the taxes collected at Bordeaux will stream to the treasury at Paris, to be employed in maintaining the government. Part of these taxes will be expended at Paris, to support the officials who live in the capital, the central army, etc. Part, however, must be used to fulfil the local needs of Bordeaux; and on the road from the capital to the province we shall find money and wares, going as salaries to officials, appropriations for public works and the like. On this road, furthermore, we shall find a stream of messages, sent by the central government to its local subordinates, directing them in their work; these messages will answer the reports of officials and the petitions and complaints of subjects.

31. Impossibility of applying modern methods of government in the period after the fall of Rome. — The system of government, thus roughly outlined, was the system used in the period when Rome was still strong. But when the power of Rome declined it became constantly more difficult to maintain a system of the kind; every obstacle to the free passage of men and wares weakened the hold of the government on its provinces. The roads grew worse, and while they were still passable the danger of traversing them increased, so that the expense of maintaining this government became prohibitive. The reports from officials and the petitions from subjects were delayed or lost; only a small part of the local taxes reached the treasury at the center. The central government, on its side, found that it had no longer the means to pay the bills for salaries and public works in the provinces, and found that its commands were not received there, or were not obeyed, because the government could no longer send officials and troops to force obedience.

32. The feudal system; rise and character. — The time came, finally, when the government had to recognize publicly the change in conditions, and to adopt a system of quite a different kind, known as the feudal system. In substance it told the man who before had been a salaried official that it could no longer pay salaries, and that he must support himself henceforth from the revenues of land which would formerly have gone to it as taxes. It maintained still a nominal superiority, and exacted from the feudal lords who now assumed the responsibility of government certain payments for general public service, occasionally a sum of money and more frequently personal service of a military or judicial kind. Practically, however, the state had split into little pieces; the central government had lost the right even to nominate the successor of an official, and each was succeeded in the duties and profits of government by his son, as though he had been a petty king. It is impossible to state accurately the number of little governments of this kind that existed in the different countries of Europe; in France, in the tenth century, it is supposed to have exceeded 10,000. The character of government varied greatly, of course, according to local conditions, not only in different countries but in different parts of the same country, but it was everywhere extremely low when measured by modern standards. This will be apparent as we survey the conditions under which commerce was carried on in the period known as the Dark Ages.

33. Difficulties and dangers of transportation. — Attempt was made to maintain the roads, which of course are essential to trade by sea as well as by land, by making the proprietors through whose land they ran responsible for their repair. Many of the proprietors managed to escape contribution, and what work was done was largely wasted, through ignorance and lack of proper superintendence. We shall see that even in later periods the roads were bad; in this early time they were so bad that they seem to have been mere tracks, of service to passengers on foot or on horseback, but of little use for wagon traffic.

The merchant suffered even more, however, from bad men than from bad roads. Government was so weak that robbery was common; people were so ignorant of everything outside the narrow sphere of local interests that they suspected every stranger, and too often with reason. There is a whole series of English laws, beginning about 700 and continuing for centuries, of which this is an early example "If a man come from afar, or a stranger, go out of the highway, and he then neither shout nor blow a horn; he is to be accounted a thief, either to be slain or to be redeemed."

34. Restrictions imposed to insure security. The market. — The dangers of travel required a merchant to go in company with others, and the danger that a merchant would himself turn robber made it necessary for him to subject himself constantly to public supervision, and to get residents who would act as sureties for his good behavior. In England, even in the eleventh century, the central government thought it necessary to pass a law "that every man above twelve years of age make oath that he will neither be a thief nor cognizant of theft." Such a general statute would surely be of little use.

Many other statutes of a more specific nature were passed, which may have helped to repress robbery, but which must have hampered trade at the same time. The idea in general was to force a man to make his purchases in public, so that if he appeared at home with new wares he could get witnesses to prove that he came honestly by them. Cattle formed a large part of the personal property in early times, and as these could readily be stolen, many laws were passed restricting the trade in cattle. Other things were included in the restriction, however, as the need of protecting commerce became more apparent. In England, in the tenth century, a man was not allowed to buy or sell any goods above the value of twenty pence, unless he did it within a town where a public official and witnesses could legitimate the bargain. In this practice is found the origin of the market, a medieval institution of which more will be said later. A market was a place appointed by the government, where bargains could properly be made; and only small exchanges of household produce could be made outside it, in the open country. Beginning in the need that was felt to prevent thieving it developed as a public institution, which the people found it profitable to extend as a means of collecting tolls and of regulating internal trade.

35. Society organized to exist with the minimum of commerce; the medieval village. — The striking and important feature in the life of European peoples at this period was not the large amount of commerce carried on, but the small amount. The people were organized on a system which enabled them to support life with the least commerce possible. Instead of being concentrated in towns, they were isolated in little groups, often called manors, one of which would be composed often of less than 100 people, who got their living from the square mile or so of land surrounding them. It is not necessary here to discuss the social and political life of these little groups, though it is proper to remark that often some of the inhabitants were slaves, and many more were only half-free, like the Russian serfs of the nineteenth century.

36. Self-sufficiency of the villages; low stage of the arts of production. — The economic life of these village groups is the side in which we are interested, and the chief point in that was the *self-sufficiency* of each group. A village tried to produce everything that it wanted, to be free from the uncertainty and expense of trade. We find, then, that almost all the people in a village were agriculturists, and these raised the necessary food supply by methods which were always crude, and were often very cumbersome and wasteful. The stock was of such a poor breed that a grown ox seems to have been little larger than a calf of the present day, and the fleece of a sheep weighed often less than two ounces. Many of the stock had to be killed before winter, as there was no proper fodder to keep them, and those that survived were often so weak in the spring that they had to be dragged to pasture on a sledge. Insufficient stock meant insufficient manure, and though the fields were allowed to lie fallow every third year they were exhausted by constant crops of cereals, and gave a yield of only about six bushels of wheat an acre, of which two had to be retained for seed.

Not only the food but nearly everything else had to be raised where it was to be consumed. Houses were constructed of materials from the forest, clothes were made out of flax and wool from the village fields, furniture and implements were made at home. Nearly every village had a mill, usually run by water, to grind its meal or flour; some villages had a smith or carpenter; few special artisans beside those suggested were to be found in the ordinary manor.

37. Evils resulting from the lack of commerce. — Before we proceed to describe the growth of European commerce from such origins it will be well to stop and consider the results of a system which was based on the lack of commerce. With regard to the main product, food staples, the result was an alternation of *waste* and *want.* A good year brought a surplus for which there was no market outside the village, and which could not be worked up inside for lack of manufacturing skill and implements. A bad harvest, on the other hand, meant serious suffering, because there was no opportunity to buy food supplies outside the manor and bring them to it. Nearly every year was marked by a famine in one part or another of a country, and famine was often followed by pestilence. Diseases now almost unknown in the civilized world, like leprosy and ergotism or St. Anthony's fire, were not infrequent. The food at best was coarse and monotonous; the houses were mere hovels of boughs and mud; the clothes were a few garments of rude stuff. Nothing better could be procured so long as everything had to be produced on the spot and made ready for use by the people themselves. Finally, these people were coarse and ignorant, with little regard for personal cleanliness or for moral laws, and with practically no interests outside the narrow bounds of the little village in which they lived.

38. Exceptional instances of higher organization of industry. — These conditions existed all over western Europe, and may be taken as typical of the period about the year 1000. Though they determined the commerce, or better the lack of commerce, at this time, they were not absolutely universal. Great feudal princes and great monasteries owned each a considerable number of villages or manors, and tried to introduce a more advanced economic system among them. A great lord would have his shoemaker and tailor, his saddler, swordsmith, etc.; and would have a considerable number of women gathered in a sort of factory making clothes. It is noteworthy, however, that the difficulties of transportation were so great that for a long time to come it was not practicable to concentrate the food supplies of a large group of manors in one place, and the owner would have to go to the food instead of having it brought to him. So we read of the kings and princes being always on the road, traveling with court and retinue from one manor to another, eating up the surplus that had accumulated and then moving on.

39. Common wares of commerce in the period of the manor. — Absolute self-sufficiency was impossible; it was the ideal at which the managers of the manor aimed, but there were few manors which could supply all the necessaries of life. The list, however, of articles which had to be procured by commerce with the outside world was small. Salt was one item, of special importance as it was so difficult to keep live stock through the winter, and the animals had to be killed and salted down. Iron was necessary for various implements, though it was so expensive that it was spared in every possible way. Other articles had to be bought as occasion arose, stones for the mill or tar to keep the murrain from sheep. These wares were essential to existence; by channels so obscure that they cannot now be traced they reached the places where they were wanted, and were purchased with part of the manor's scanty surplus. Cattle and horses formed also, as is natural, common objects of exchange.

40. The slave trade in Europe. — One ware which had long been an object of commerce was of especial importance in the period just after the fall of Rome, and, indeed, for some time later; this was slaves. The slave trade extended over all Europe, and had great markets on the Mediterranean, the North, and the Baltic seas. Merchants drove troops of slaves in chains from one country to another, or exported them in lots of 100 or more. In the slave markets of the Baltic as many as 700 are said to have been put up for sale at once. A number of English laws regulated the slave trade of the time. It seems to have been largely confined to convicts, but a law of Alfred provided that a father should not sell his daughter to servitude among strange people. Later the English laws forbade the trade entirely, but we read of Bristol merchants in the eleventh century who not only bought slaves all over England for export to Ireland, but bred them as well; and the trade persisted in various sections even later.

41. Distant commerce confined to rare luxuries. — Under conditions such as these the term "foreign commerce" in its modern sense is meaningless. The areas which now form the countries of Europe did not specialize in the production of different wares, so that we can trace a regular exchange of products between them. Most of the common wares of commerce circulated inside a restricted area. Only the rich could afford to pay for the transportation of wares over any distance, and they would spend their money only for valuable luxuries. The dignitaries of the church, by reason of their higher culture and connection with a universal organization, created a demand for a few foreign wares, and the governing classes wanted some things which could not be produced at home. Wines and spices were brought up from southern Europe, along the river routes and over the passes of the Alps, and furs were brought down from the North.

Distant sea voyages were still uncommon. An English law of about 900 provided that "if a merchant thrived so that he fared thrice over the wide sea by his own vessel" he might be promoted to a higher social class; and later laws refer to merchant ships again. The Scandinavians have left records of adventurous voyages to the North and West, and a vast number of silver coins found in Russia and the Baltic countries shows that a land trade with southwestern Asia persisted in the period of which we treat. It is only toward the close of this period, however, that we begin to get details about distant commerce, and can see that it is firmly established. The Institutes of London, issued in the eleventh century, and regulating the commerce of the town, mention ships coming from Flanders, from Rouen and other places in France, and from Germany. Foreign merchants bought wool and pigs, and sold wine, furs, spices, gloves, and fish.

42. Character of the merchant in the early Middle Ages. — We know even less of the person of the merchant, in this period (about 1000 A.D.), than of the wares that he carried. It is certain, at any rate, that the merchant was not the specialist that he afterwards became, but was a jack-of-all-trades. He might be wholesaler and retailer, transporter and pedler, and often an artisan too. Nothing like the country store of the present day existed, and trade outside the few centers where markets had been established was carried on by pedlers, who carried their wares on the back or on a pack animal. Every merchant was sure to be something of a soldier, as he was thrown largely on his own resources for self-defence; and he often assumed the garb of a missionary or pilgrim to get the help of the church in carrying on his trade. The pilgrim was exempt from many burdens laid on the ordinary traveler or merchant, and though this exemption had later to be abolished, because it was so frequently abused, it seems to have been of great use in helping commerce through its early stages.

QUESTIONS AND TOPICS

1. Modern France has, approximately, an area of 200,000 square miles. Calculate the average size of the feudal state about the year 1000, and compare it with the county in which you live.

2. Can you suggest anything in cow-boy life on the plains of the West reminding you of feudal conditions, when the State was weak?

3. What district, known to you, has the least commerce with the outside world?

4. How does the yield of wheat, as given in the text, compare with the yield in different parts of the U. S.? [See Abstract of the United States Census.]

5. Show why the lack of commerce requires small groups of people to produce everything for themselves, and why this self-sufficiency involves a low standard of living.

6. How does commerce remedy the waste and want which are characteristic of self-sufficiency? Why cannot people plan to produce just enough food?

7. Report on the wares and workmen collected on the estates of a great king. [Falkner, Statistical documents of the Middle Ages, Philadelphia, 1896, 10 cents, pp. 2–5.]

8. Name some wares, important in the stock of even the smallest country store, which did not appear in commerce in the period of the

manor. Show the necessity of each one of the wares mentioned in the text.

9. Why could a profitable commerce in slaves be carried on when other wares did not pay the merchant?

10. What are the luxuries which a trader now can afford to pack into the uncivilized districts of Africa and America?

BIBLIOGRAPHY

References on the rise and character of feudalism may be found in many manuals of European history; among others Emerton, Introduction, 236; Mediæval Europe, 477; Robinson, Middle Ages, 119. Brief accounts, mainly for the student of political history, may be found in the above, in Adams, European Hist., 185–191; and in the same author's * Civilization, chap. 9. The best account of the feudal system in English is Seignobos, ** Feudal regime, N. Y., Holt, 1903.

Most of the books describing conditions in this period treat them either from the political or the agrarian standpoint; the writer knows nothing, suitable for student's reading, discussing the origins of commerce at this time. See, therefore, Cunningham, Growth, vol. 1, book 1, or the smaller manuals on English economic history.

CHAPTER VI

TOWN TRADE

43. Significance of towns in the economic organization; decline of the Roman towns. — In the latter part of the Middle Ages, beginning after the year 1000, a striking change took place in the life of Europe; the people advanced so rapidly in their economic and political organization that we can make this a new era in their history. It will be necessary to notice the important changes in detail, but we can summarize them now, from the economic standpoint, by saying that people advanced from the stage of the village or manor to that of the town. A town, as the word will be used here, means a group of at least several hundred, perhaps several thousand people, settled closely together, and maintaining themselves in large part by manufactures and trade. Such towns had existed, as noted above, in the Roman Empire of the West. In Roman Gaul (modern France) there were over one hundred of them. They depended for their existence, however, on the stimulus of Roman culture, and on the security which good government could afford to their trade. A manufacturing class evidently could not eat the wares it made, and needed the chance to exchange them for food products from the country districts if it was to maintain itself. In the period before, during, and after the German invasions the chance for exchange grew steadily less, as we have seen. Some of the towns were entirely destroyed in the period of disorder which followed the fall of the Roman government. London, for instance, which had been a flourishing town under Roman rule, must have become a mere heap of rubbish, for when it was rebuilt in later times no attempt was made to follow the lines of the old streets, and new streets were laid out over the ruins of former houses. When a town was not actually destroyed it ceased to live; the inhabitants had to take to agriculture to support themselves, and the town shrank to a mere village, which could not be distinguished from the manors about it. Of more than 500 modern French cities scarcely 80 can be traced back to the Roman period, and all of these lost their identity as towns and became simple villages in the intervening time.

44. Rise of towns after 1000; conditions determining their location. — We read of towns in Europe before the year 1000 but they scarcely deserve the name; they were rather the germs from which towns were later to spring. Considerable numbers of people would collect in the place where some great feudal lord spent most of his time, or where a monastery had been founded; garrisons would be established at places suitable for military operations. We must regard such groups, however, as supported by taxation rather than by the trade of individuals, from which most urban groups arise. Trade of this kind became, however, so considerable after the year 1000 that real towns grew up in constantly increasing numbers. Their position was determined by two important conditions of existence, 1/political protection and 2/the chance for profitable trade. People found the former by nestling under the walls of some castle or monastery; the many French towns which bear the name of some saint show how much the protection of the church was prized. The latter object was generally attained by founding the town at some break in a line of transportation, where goods had to be transshipped and where merchants would naturally congregate to rest and exchange their wares (cf. Ox-ford, Cam-bridge, etc.). We find the most considerable towns, therefore, along the seacoast and rivers, and at breaks or intersections of the land routes.

45. Development of manufacturing in the towns. — The rise of the towns brought with it, as has been suggested, a new era in manufactures. In the ordinary village it did not pay men to specialize in the production of wares, as the market was so small. A shoemaker, for instance, could not make a living by selling 50 or 100 pairs of shoes a year. If we think, however, of a village growing into a town surrounded by a considerable country population, we see that the market has widened into an area of size sufficient to support a number of specialists. Manufacturing became a *profession* to which men devoted most of their time. A man could learn his trade much more thoroughly, and could afford to make the tools which would enable him to exercise it most efficiently. The result was an increase in production which enabled the people on a given area to live far more comfortably than they had done before.

46. Effect of the towns in improving the conditions in the country. — This movement was bound to change the conditions of life in the country districts. The people there were freed from the necessity of devoting part of their time to work which they never did well; they could apply most of their energy to agriculture, and could use the surplus crop which they thus obtained, for a profitable exchange with the artisans of the town. The growth of towns affected them in another way. In the purely manorial period a serf could not better his condition by running away; he had nowhere to go except to other manors like the one he had left, where his condition might actually be worse than before. In the towns, however, practically all the population were free; the artisans were numerous and intelligent enough to provide for their own protection, and did not need to subject themselves to a lord. The towns were islands of freedom in a sea of serfdom or of half-freedom. The custom established itself that a serf who could escape from his lord, and who lived a year and a day within the walls of a town, became a free man, and could not be reduced to his former position. Landlords found that they must bid against the attractions of the town if they were to keep the laborers in the country, and agreed to lighten their burdens if they would stay. Many influences worked together, and the results were modified by many factors.

especially of a political kind, in various countries, but the upward movement of the country population was general throughout western Europe. Free men produced more than serfs, and this was another influence increasing the surplus of the country districts, and furthering trade thereby.

47. The "foreign" trade of this period was that between towns, even in the same country. — The student who has begun the history of commerce with the notion, as common as it is erroneous, that the foreign trade of a country is more important than its internal trade, and who is impatient to arrive at the description of this foreign trade, will be disappointed to learn that even in the latter part of the Middle Ages it scarcely existed in the modern sense. We mean now by foreign trade that between states — between the United States and Germany, for example. In the manorial period, as has been suggested, foreign trade was rather that which existed between manors. In the period under discussion it was that which existed between towns. The towns existing inside the boundaries of a modern European country did not, it is true, differ as much among themselves, in their products, as they differed, taking them altogether, from the towns of another country. But the expense of transportation restricted most trade still to a comparatively small radius, and the town, rather than the country, was the natural trading unit. The radius of profitable trade, for most articles, was so small that an English town would have its most important commercial relations with the other English towns rather than with the towns of foreign countries. The town, moreover, was the unit for regulating trade. Each town would have its own customs tariff, and to a merchant of London it made little difference whether he traded with Southampton or with Paris; national regulation was less important than municipal. Climatic and historical influences, it is true, made a clearly marked distinction between the great sections of Europe, the North and the South, the East and the West, and we shall have to take up some of these sections in detail; but we shall use our time most effectively by spending it not on the features of trade in the different modern countries considered separately, but on the characteristics of trade common to all the advanced countries.

48. Small size of the medieval towns. — A point deserving special emphasis in the description of the medieval town is this, that though the town comprised practically all the mercantile and manufacturing population of a country, and though it marked a tremendous advance over the village, yet the town was a very small affair when measured by modern standards. In England in the thirteenth and fourteenth centuries the average size of the first class of towns was probably below 5,000 inhabitants; few had more than 10,000 and many had less than 1,000. On the Continent, in the last centuries of the Middle Ages, even celebrated cities like Nuremberg and Strassburg had not over 20,000 inhabitants. Frankfort on the Main had scarcely 10,000, and other cities which played a great part in economic and political history had even less.

49. Rural characteristics of the towns. — Another misconception must be guarded against. Though the town was a distinctly industrial group in comparison with the village, yet each town had grown from a village, and retained many features of its agricultural infancy even to a late period. Most of the townspeople owned some land which they used for garden plots, and every town had considerable amounts of arable and pasture land outside the walls which was used for the benefit of the townspeople if not actually worked by them. In Coblentz, in the thirteenth century, work on the city walls was stopped during harvest by lack of labor, and in London at the same period people were allowed to keep pigs "within their houses," and the attempt to keep vagrant swine off the streets was a distinct failure.

50. General description of a town. — There were generally a few streets that were broad and straight, as they were the old highways on which the town had grown up. The attempt was made to keep these clear of encroaching houses and shops by sending a horseman through them once a year with a spear held horizontally, and by forcing the removal of obstructions. Most of the streets, however, had grown up from village by-paths and were narrow and crooked. They were rarely paved, and as they served as the repository for all kinds of offal and garbage we can understand why the townspeople wore wooden overshoes when they went out, and even the saints in the pictures were painted with them on. The houses were of wood in the early period, and there were no chimneys, so that fires were frequent and disastrous until they forced people to a better mode of building. Travelers in Europe now remark upon the picturesque beauty of the old houses, and upon the merits of their construction, but it should be noted that most of these relics date from the very end of the Middle Ages and that they were the select few of their time, and give no indication of the character of the average house. Most of the people lived in narrow quarters, dark and drafty, unsuited for good work places and unwholesome as habitations. Wares were exposed for sale either in the open market-places which are so common in European towns, or in little shops like pedlers' booths at the front of the house. The municipal government spent little or nothing for public works or police protection; it tried to make the inhabitants share in performing all absolutely necessary duties, but succeeded so ill that all the towns were sinks of disease, and breach of the peace was a constant occurrence.

51. Improvement in conditions in the later Middle Ages. — In the early period of the towns, say before 1300, conditions were distinctly worse than they were in the last two centuries of the Middle Ages, when commerce had attained such development that it brought great wealth to some and comparative comfort to many among the city people. The town of Colchester, in England, ranked as one of importance in 1295, but a tax roll of that date shows a striking poverty in the stock in trade assessed for taxation, in the small value of household furniture, in the insignificant amount of most of the assessments, and in the preponderance of rural wealth like live stock and agricultural produce over other kinds of personal property. In the fourteenth century, however, the population of the town doubled, and in the fourteenth and fifteenth centuries the towns of England in general freed themselves from the worst features of medieval squalor, accumulated wealth, and expended large sums in building and improvements.

52. Town organization. The merchant gilds. — Much more might be said about the general characteristics of the medieval town, but the student of the history of commerce must devote most of his time to its economic life. He must prepare himself to accept and understand conditions quite different from those of modern times, and must try to realize how much the world has gained by the advance of the commercial organization from these early stages. In every town the merchants and manufacturers were organized in *gilds* and subject to strict regulation. The Anglo-Saxon word gild means "a contribution to a common fund," and came to be applied to the society itself. Societies had existed in the first part of the Middle Ages with social and religious objects, and about the eleventh century, with the springing up of trade, commercial gilds became more and more common. It is supposed that the dangers and difficulties of trade were then so great that merchants united in bands for a journey, as caravans are now formed in the unsettled countries of the East. A collection of early gild rules shows that the members were subject to regulations like the following: Every one was obliged to carry armor, a bow and twelve arrows on penalty of a fine; they must stand by and help each other when they set out for a journey; in case one member had not sold his wares the others must wait one day for him; if one was imprisoned or lost his wares on the road the others must ransom him. The organization was probably temporary at first, and the company of merchants dissolved at the end of the trip; but as such caravans became more regular at any place there grew the tendency to permanence of organization. These merchant gilds were at first also private associations, formed voluntarily by the merchants to protect themselves; but they received public recognition and became a part of the town government as the town saw the advantage it could get from them in pushing its trade and protecting it against the efforts of rivals. They included not only professional merchants, but all who bought and sold, including many artisans. Of the nine members who belonged to the Shrewsbury merchant gild in its earliest period two were fishermen and one was a butcher.

53. Position of the merchant gilds; their privilege of monopoly. — These merchant gilds did not exist in all parts of Europe, and differed much from each other in the various regions where they did exist. In England, which we shall choose to illustrate their operation, they became regular parts of the town government. They were granted one most important privilege, the exclusive right of trading within the town. "Foreigners," which meant at this period the people from any other town, whether English or not, were allowed to bring their wares to the town and to sell them wholesale, but they were forbidden to purchase wares which the townspeople wanted for themselves, and they were not allowed to keep shops and to sell retail. The gilds were not like modern "trusts," for, in the first place, their membership was very broad, and, in the second, they were associations of men, not of capital, and there was no division of profits among the members. There was a strong feeling of solidarity among the members, however, and competition between them was discouraged. In some places there was a law that if a gildsman made a bargain for any ware another gildsman had the right to share in it if he gave security that he could pay for the portion he desired.

54. Development of manufactures in the towns; the common handicrafts. — The growth of towns led, as has been said, to a specialization in manufactures which was impossible before. All the industries that had been carried on in villages were continued in towns by professional craftsmen, and new ones were added as the demand for them grew. There were from a dozen to a score of handicrafts which supported for centuries the staple manufacturing groups of the towns: butchers, bakers, brewers, blacksmiths, goldsmiths, coppersmiths, masons, carpenters, cabinet-makers, wheelwrights, skinners or furriers, tanners, shoemakers, saddlers and harness makers, weavers, dyers, fullers, and tailors. Most of these terms will be familiar to the reader. Coppersmiths took the place of the modern tinsmiths before the introduction of tinned iron. Fullers improved the texture of cloth after it had been woven, by beating and washing it with fuller's earth, a clay which absorbs the grease from the wool; the cloth loses in length and breadth but gains in body and thickness.

55. The craft gilds. — The craftsmen, like the traders, were organized in gilds, which followed shortly after the rise of merchant gilds. The general reason for their existence was the desire on the part of members of a particular craft to be free to regulate their professional affairs as they pleased, and the willingness on the part of the public authorities to grant them this privilege when it seemed to promise better work and better products for the consumer. To insure efficient regulation the grant of monopoly was necessary, and accordingly no one was allowed to practise a craft who did not belong to the appropriate gild. We shall see that the monopoly was greatly abused in later times and was a serious hindrance to the development of manufacturing. At the start, however, the craft gilds were liberal; they desired a large number of members to increase their political importance, and admitted them freely; inside the gild the class distinctions were at first unimportant. "The regulations drawn up by the crafts aimed at the prevention of fraud, and the observance of certain standards of size and quality in the wares produced. Articles made in violation of these rules were called 'false,' just as clipped or counterfeit coin was 'false money.' For such 'false work' the makers were punished by fines (one half going to the craft, the other half to the town funds), and, upon the third or fourth offence, by expulsion from the trade.

Penalties were provided, as far as possible, for every sort or deceitful device; such as putting better wares at the top of a bale than below, moistening groceries so as to make them heavier, selling second-hand furs for new, soldering together broken swords, selling sheep leather for doe leather, and many other like tricks."

56. Town policy; imports, exports, protection. — Every town felt a community of interests among its inhabitants and a competition with the inhabitants of other towns, which expressed themselves in a town policy very like the national commercial policy of the modern state. We can consider this municipal policy under several different heads.

(1) Every town had what may be called a "revenue tariff," consisting of duties levied on articles brought within the walls, with additional dues for the use of the market. As an example we can cite a brief extract from one of the London tariffs, giving the customs on victuals. "Every load of poultry that comes upon horse, shall pay three farthings, the franchise excepted. . . . If a man or woman brings any manner of poultry upon horse, and lets it touch the ground, such person shall pay for stallage three farthings. And if a man carries it upon his back and places it upon the ground, he shall pay one half-penny, of whatever franchise he may be." It is interesting to note that this custom still survives in some European cities (*octroi*).

(2) Prohibitions to export goods, now rare in national policy (though suggested recently to keep English coal at home), were common in the town policy, when the supply of necessaries was small. "No butcher, or wife of a butcher, shall sell tallow or lard to a strange person for carrying to the parts beyond sea; by reason of the great dearness and scarcity that has been thereof in the City of late." "No person shall carry corn or malt out of the City, under penalty of forfeiture."

(3) The modern idea of protection was applied by the towns in a number of different ways. Bread from one part of London could not be sold in another part, which formed a

separate jurisdiction. The protection at this period was attained more commonly, however, by aiming it against persons rather than wares; the merchant always accompanied his wares at this period, so it was easy to discriminate against "foreigners," by making them pay special dues from which members "of the franchise," *i.e.*, townspeople, were excepted, and by restricting their chances for profit. Reference has been made above to the monopoly of retail trade reserved to townspeople and designed to protect the "home market."

57. The market and its regulations. — (4) The market was an institution used in this period to regulate trade for the benefit of the townspeople; the name is applied now especially to meat shops simply because regulations were imposed on butchers after other dealers were freed from them. The townspeople were afraid that traders bringing provisions for sale could impose on their needs and force higher prices by making separate individual bargains. Therefore they required the country people to bring their provisions to a certain place (market-place) at a certain time, that they might have the benefit of competition among sellers; and tried to force the traders to sell out their stock before the close of the market. That all the townspeople might have an equal chance they were forbidden to buy goods on their way to market ("forestalling"); to buy larger amounts than they needed ("engrossing"); and to buy goods for retailing before the ordinary consumers had supplied their needs ("regrating"). After the close of the market the town shop-keepers looked after the needs of retail trade.

Ignorance and distrust were still so powerful in the town period that merchants were subject to constant supervision; they had to employ officials to weigh and measure for them, and could not employ brokers to hunt up customers unless the agents were also officials acting under oath.

58. Attempts to regulate prices. The assize of bread. — The town government went even so far as to set the prices at which wares must be sold. We are familiar, nowadays, with instances of the regulation of prices by public authority, as in the case of hack fares. Such instances, however, are now exceptional, while in the Middle Ages innumerable attempts at public regulation, covering practically all wares, were made at different times and places. Most of them were soon given up, because they defeated their own object; when the price was set too low the ware was no longer offered, and people suffered more by going without than by paying the higher price. Thus it was found unwise to set a price for a necessary like wheat; and high wheat prices were allowed to work their own cure by the inducement they offered to an increase in supply. It was as hopeless to set a fixed price for bread, but the government determined that at least the baker should not make improper profits from the necessities of his customers. It established, therefore, the "assize of bread," a sliding-scale which fixed the weight or the price of a loaf according to the market price of wheat, and so restricted the power of the baker to raise his charges unduly. The same system was applied to ale, and assizes of this kind have lasted down to the nineteenth century in some countries.

QUESTIONS AND TOPICS

1. Show what would happen to our modern cities if there were an interruption of commerce, either physical (perhaps the giving out of coal) or political (wars, strikes attended with violence, etc.).

2. Study the effect on a modern city of such a brief interruption as a great blizzard.

3. Find the reasons for the rise and growth of the following: London, York, Paris, St. Omer, Lille, St. Denis, Lyons, Bruges, St. Cloud. [Use a geography and the encyclopedia.]

4. Starting from the statements in the text, that in a manor of 100 inhabitants the only specialists were perhaps miller and smith, try to think of specialists who would appear as the group grew in size to 1,000; to 10,000; to 100,000; 1,000,000. For example, when would the following appear: watch-maker, artificial limb-maker, shoe-maker, saddler? [The business directory of a city may supply helpful suggestions.]

5. How has the growth of cities in the U. S. affected the agriculture of the surrounding districts and the welfare of the farmers?

6. Compare the size of medieval towns with that of towns and vil-

lages familiar to you, and try to realize the conditions if all the larger cities were swept off the map. [See Abstract of the Census of U. S. giving the population of all places having 2,500 or more inhabitants, arranged by States.]

7. (*a*) Make a list of the ten or fifteen largest towns in modern England. [Statesman's Year-Book, index, England, cities and towns.] (*b*) Compare this with a list of towns in early times and discover what large towns are of recent origin. [Cheyney, English towns, pp. 35–39. Beware of the large figures of population, p. 38; they are misleading.]

8. Write a report on the economic and social life of a medieval town. [See M. D. Harris, Life, or the original local customs in Cheyney, English towns, pp. 2–6.]

9. Write a similar report on the merchant gilds. [Harris, Life, chap. 7; Cheyney, English towns, pp. 12–20.]

10. Reviewing the list of trades in the text, try to realize how the people managed in the manorial period, when professional specialists in these trades were lacking.

11. Study the list of craft gilds in York, 1415; find from dictionary and encyclopædia the meaning of each trade mentioned; arrange them in classes, as for example: food, clothing, building utensils, personal service, etc. [Cheyney, English towns, pp. 29–32.]

12. Write a report on the town artisans and the craft gilds. [Harris, Life, chap. 13; Cheyney, English towns, pp. 21–29.]

13. Compare medieval and modern ideas on the regulation of trade. [Farrer, The State in its relation to trade, N. Y., Macmillan, 1902, $1.]

BIBLIOGRAPHY

Gross, Sources, §§ 24*a*, 72.

General. — For the significance of towns in the development of the industrial organization the student may be referred to two important books, differing in details: Schmoller, Merc. system; Bücher, Indust. evolution. Chapters on the rise of towns and town life will be found in Adams, * Civ.; Emerton, Med. Eur.; Robinson, Middle Ages; Munro, Hist.; etc. Greater emphasis is, of course, laid on the economic (including commercial) aspects of town life in ** Ashley and * Cunningham. Jessopp, * Coming, gives a vivid picture of urban and rural life of the period. Mary D. Harris. ** Life in an old English town (Coventry), London, 1898 (N. Y., Macmillan, $1.75), should be very useful to student and teacher. Green, ** English Towns, is valuable and interesting for the English towns of the fifteenth century.

Sources. — Cheyney, ** English towns and gilds, Penn. Translations, Phila., 1895, $.20, gives an excellent selection, which can be used to advantage with advanced students.

CHAPTER VII

LAND TRADE

59. Roads neglected, or left to benevolent associations. — The maintenance of the roads was still left to local authorities. We find in the court records of manors that the people reported stretches of road which were in bad condition, and ordered that they should be repaired under penalty of fine; but a road had to be very bad before it attracted attention, and received little care at best. The clergy were the leaders in maintaining the roads, for their estates were scattered and they felt the need of transportation as none other but merchants did. Pious persons also devoted themselves to this object, as a meritorious work like visiting the sick or caring for the poor; they formed associations to keep roads in repair, and left bequests to allow the work to be carried on after their death. The Alpine hospices, which are so familiar to visitors in Switzerland now, were established by religious orders to help travelers and merchants on their way.

60. Difficulties of transportation by road. — A feudal lawyer distinguished in theory five kinds of roads: the path, the wagon road of eight feet, the road of sixteen feet, the highway of thirty-two feet, and the Roman roads of sixty-four feet. There was nothing in reality to correspond to this distinction. The Roman roads were still in use, but they were too much worn and too few in number to raise the general level of transportation. When an English king wanted to transport provisions to Scotland about 1300, he required four horses, or, in the northern counties, eight oxen to a wagon. Transportation by wagon was so difficult that pack animals were still in general use and travelers nearly always went on horseback, both men and women riding astride, and twenty miles being considered a fair day's journey. The town of Bristol was granted a county court in 1373 to save the townspeople the journey to Gloucester, "distant thirty miles of road, deep, especially in winter time, and dangerous to passengers." At the very end of this period (1499) a glover traveling to market at Aylesbury was drowned with his horse in a pit which a miller had dug to get clay from the road. A court acquitted the miller on the ground that he had no malicious intent, and really did not know of any other place where he could get the kind of clay he wanted.

61. Lack of bridges. — Bridges were still rare. Those which the Romans had built fell into ruins; they were rebuilt in wood, or replaced by bridges of boats, by simple ferries, or by mere fords. Complaint was made to the English Parliament in 1376 that nobody was bound to maintain the bridge over the Trent near Nottingham; the bridge was "ruinous," and "oftentimes have several persons been drowned, as well horsemen, as carts, man and harness": Parliament refused authority to keep the bridge in repair. A large number of towns had grown up on rivers, as is shown, for instance, by the number of English town names ending in -ford, -bridge, -ferry; and the difficulty and danger of crossing the streams were serious obstacles to trade. Pious and public-spirited people took up the work which the government was still unable to undertake, and devoted their time and money to the construction and repair of bridges; the church assisted by the grant of indulgences (remitting church punishments for sins) to those who contributed. Even now the religious character of some of the European bridges is attested by the chapels built on or near them.

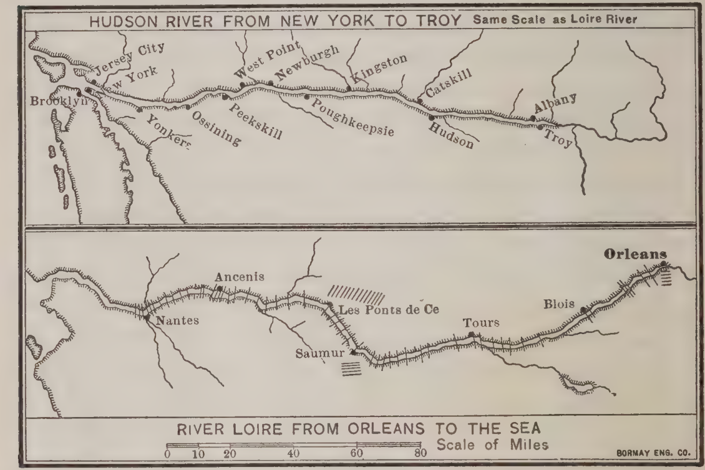
62. Advantages of river transportation. — The difficulties of land transport led to the use of river navigation wherever it was practicable. It is said that the flow of many European rivers was more full in the Middle Ages than it is now, and though the course was apt to be obstructed by mill dams and fish-weirs, and little was done to preserve the channel, merchants could transport by rivers bulky articles which would not have paid for their carriage on land. A single boat, it is estimated, carried as much as 500 pack animals would take, and it often paid to go far out of the shortest way to a market to follow navigable water. It was cheaper, for instance, to bring salt from Lüneburg to Brandenburg by way of Lübeck and Stettin, though the direct land route was of course far shorter.

63. Danger of violence on the road. — The physical difficulties of travel were accompanied by danger of violence of which people nowadays have little conception. The church attempted to secure the safety of merchants, and cooperated with the political authorities in maintaining the "Peace of God," and in repressing disorder. The feudal system had developed into a more efficient system of government in its later period, and something like the modern state rose from it before the close of the Middle Ages. But in spite of all efforts highway robbery and violence were regular and normal occurrences, even in the more advanced countries. In many parts of Europe merchants still traveled in temporary bands or "caravans," for better protection, and students going to college in England were encouraged to carry arms on the journey.

64. Complicity of feudal lords in robbery. — The King of France tried in vain, in the thirteenth century, to make feudal lords responsible for crimes committed in their territories. The lords were often accomplices in the crimes; the King himself was not always above suspicion; and even dignitaries of the church or heroes of the crusades turned highway robbers on occasion. An indication of the conditions is given by a complaint of the English House of Commons in 1348. "Whereas it is notoriously known throughout all the shires of England that robbers, thieves, and other malefactors on foot and on horseback, go and ride on the highway through all the land in divers places, committing larcenies and robberies; may it please our lord the king to charge the nobility of the land that none such be maintained by them, privately nor openly; but that they help to arrest and take such bad fellows." A century before, two merchants from the continent had been robbed in Hampshire; the culprits were arrested, but could not be convicted for a long time; finally more than sixty persons were executed for complicity in this and similar crimes, the number including many men of position, numerous royal officials and some even of the king's household. Shakespeare's story of Prince Hal's exploits on the road may not be true, but it is not at all improbable.

65. Tolls imposed by feudal authorities. — It would be a great mistake to suppose that the merchant's expense comprised only the sums necessary to transport his goods over bad roads and to protect himself against robbers. In addition every merchant had to pay the feudal tolls: tolls for the repair of a road which was not kept up, and tolls for protection which he had to furnish himself. Feudal lords were everywhere, and every feudal lord tried to make money out of the movement of men and goods. As early as the time of Charlemagne (809) we find the central government attempting to keep the ways of commerce open. Charlemagne forbade the compelling of travelers to use bridges when there were short-cuts, or the building of bridges in dry places to extort passage money from travelers, or the stretching of ropes across streams to force ships to pay for the right of passage with money or wares. The attempt was vain. The power of the central government fell into the hands of local lords, and was exercised by them without regard to any but selfish and local interests.

66. Variety and number of tolls. — The variety of feudal tolls is almost inconceivable. Attempts by scholars to classify them as we should modern fees and taxes are useless, because no principle underlay the system. A French scholar has made a list of seventeen different kinds of tolls, but this is rough and incomplete. We can say in general that tolls were levied everywhere and on everything. Even a jongleur, the equivalent to the modern organ-grinder, could not pass the gates of Paris without making his monkey show off to pay his own way. A man had to pay toll not only when he went *over* a bridge; he had to pay a toll when he went *under* it, and could not escape the toll by going *around* it.



Places at which tolls were levied are marked by a line across the river, or, when many were levied at one place, by lines drawn near the river. The tolls as shown were established at different times down to the seventeenth century, and affected different wares; so that a merchant did not have to pay all of them at any time. The map of the Hudson is inserted as a help in estimating distances.

In the thirteenth century there were on one side of the Rhone four toll-stations on a stretch of little over thirty miles. In the fourteenth century there were 74 tolls on the Loire, from Roanne to Nantes; 12 on the Allier; 10 on the Sarth; 60 on the Rhone and Saone; 70 on the Garonne or on the land-routes between la Reole and Narbonne; 9 on the Seine between the Grand Pont of Paris and the Roche-Guyon. There were 13 toll-stations on the Rhine between Mainz and Cologne. In a few hours' walk around Nuremberg one passed 10 stations.

The traveler abroad, whose route follows the line of medieval trade, is struck with the number of feudal castles which he passes. He admires the picturesque ruins, perhaps, without realizing that each castle was once a toll station and without reflecting that the Hudson shows a higher stage of civilization than the Rhine.

67. Abuses of the tolls. — The burden of the tolls was aggravated by the fact, already suggested, that the merchant got nothing in return except the right to look out for himself. The merchants were forced to associate to do what the river lords neglected: keep up the tow-paths, drag the river-bed, build warehouses and wharves. The merchant might pay a lord for a safe-conduct which was supposed to assure him protection in a certain territory, and then be robbed by the lord himself.

According to the feudal theory exemption from tolls must be granted in certain cases. Supplies for the army and navy, for the king and higher officials, for churches, hospitals, and monasteries, should pay no toll. Scholars at the universities enjoyed in theory an immunity which they could not secure in fact. The merchant, however, was always regarded as fair prey, and wares of commerce which were supposed to be exempt, as in France, for instance, wares on their way to Lyons fair, enjoyed only partial immunity. A sixteenth-century French writer instances as an example of the oppression of tolls the case of a merchant who shipped to the East some cloth that was wet on the voyage and had to be sent back to Paris to be redyed; all along the road in France the tolls had to be paid over again. The collectors levied toll even on grain that was being taken to mill, on cattle that were to be used as plow animals, on agricultural implements and manure.

68. Development of the toll system. — With the growth of commerce the toll-stations of course increased in value; and the practice grew up of leasing them to contractors, who paid a high sum for the privilege and had to devise, an old author tells us, "ten thousand new and unusual tyrannies, frauds and exactions" to make any profit for themselves. Many kept taverns, and managed to detain the merchant for days on various pretexts, such as absence of the proper official. Some made the merchant pay to be relieved of the necessity of having his wares unpacked and weighed and measured in detail. Many kept the tariff secret, and extorted what they could on every occasion. Some lived far from the highway, and some put their offices by design on impracticable roads, and fined the merchants heavily who went by another route.

On some routes, as along the middle Rhine, Bingen to Coblenz, it was almost impossible for commerce to be carried on except along the river, and very heavy tolls could be levied here without danger of the merchants escaping; but under other conditions the collectors established wings, as they were called, secondary offices on the side-roads to prevent evasion of the toll. Some collectors established regular pools, to use the modern term applied to railroad combination; twenty-five or thirty of them, representing perhaps five or six separate toll-areas, associated and agreed upon their rates; then they pooled and divided their profits.

69. Constraint of trade by tolls. — The establishment of toll-stations put an artificial constraint on trade, which kept it in the paths most convenient for the collectors, not most suitable to the merchants. Lords would not allow new and better roads to be built, for fear that profits on the old roads would be impaired. The compulsion to follow certain routes (German *Strassenzwang*) became a serious evil as commerce developed and sought new openings; and the loss to the public was far greater than any gain by the toll receiver.

Peculiarly noxious customs clustered around the rights which feudal lords claimed for themselves in the period when the central government was powerless. The right to a wrecked ship, which had once been the prerogative of the king, could be distorted so that the whole cargo of a Regensburg ship was confiscated in 1396 because a single little cask had fallen off into the Danube. It was an accepted rule in Germany that if a wagon broke down so that the axle touched the ground it became a part of the land and belonged to the lord of the territory; break-downs must have been frequent, in view of the wretched condition of the roads, and it has been suggested that lords sought to cause them by traps and pitfalls.

70. Burden of the tolls on trade. — The most evident effect of the tolls was the additional cost of transportation which must be paid, of course, by the consumer. The price of a ware might rise, within a comparatively short distance, so much that it could not be sold at all. It has been estimated that in the fourteenth century the Rhine tolls merely on the stretch between Bingen and Coblenz amounted to two thirds of the value of the wares. Even in the fifteenth century, and after some reform had been effected in the French tolls, the price of goods was doubled by carriage from Nantes to Orleans on the Loire or from Honfleur to Paris on the Seine.

Besides the loss of money there was the loss of time; a merchant might arrive at his destination too late to find a market for his wares, or might find that they had deteriorated on the road. The monks of Beauvais took three pennyworths from each horse load that passed by, and on fast days they spent so much time in selecting their fish that the rest of the load spoiled before it reached Paris.

QUESTIONS AND TOPICS

1. Make a study of the roads in your own State, noting (*a*) the extent of good and of bad roads, (*b*) the effect on transportation, (*c*) the system under which the roads are maintained, (*d*) organized attempts at improvement. Study the system of New Jersey and its effects. [Documents aiding in this study may be obtained from the Department of Agriculture, Washington, and probably from the government of your own State — apply to State Librarian for information.]

2. To what extent is river navigation practised in your State? Was it not more important before the introduction of railways?

3. Estimate the distance between the points named in the text, sect. 62, by land and by water.

4. Have we had in the U. S. in recent times any similar dangers of violence in transportation? [Read the history of gold-mining in California, in H. H. Bancroft or other available books.]

5. Robber knights in medieval Germany. [Baring-Gould, Story, chap. 22.]

6. Read the first part of Shakespeare, Henry IV, about the exploits of Prince Hal and Falstaff on the highway.

7. What would be the effect on trade in your State if tolls were levied on the border of every county, or even inside the counties?

8. Using a good map find from the scale of miles the length of one of the stretches mentioned in sect. 66 (for example, Mainz to Cologne), and insert the toll stations; then transfer this, changing the scale if necessary, to some road or railroad entering the place where you live.

9. Modern railroad officials are sometimes called "robber barons." Assuming the truth of charges made against them, discuss the appropriateness of the term, indicating points of likeness and of difference with respect to medieval nobles.

10. Compare medieval and modern compulsion in the choice of routes. What is alleged to be the attitude of transcontinental railroads to the construction of the Panama Canal?

11. Using the method suggested in sect. 66 apply the statements in sect. 70 to conditions at home, and show how much medieval tolls would add to the present low charges of transportation.

BIBLIOGRAPHY

By far the best reference that can be given is Jusserand, ** English wayfaring life. If a library containing older books is available much of interest will be found in Smiles, * Lives of the engineers, London, 1862, vol. 1. A good study will be found also in the Economic Review, vol. 7, July, 1897: Alice Law, English towns and roads in the thirteenth century.

CHAPTER VIII

FAIRS

71. Fairs; the reason for their existence. — The foregoing description of medieval commerce will have shown that trade was far less extensive than it is now, and will suggest the reason for one of the characteristic trading institutions of the time — the fairs.

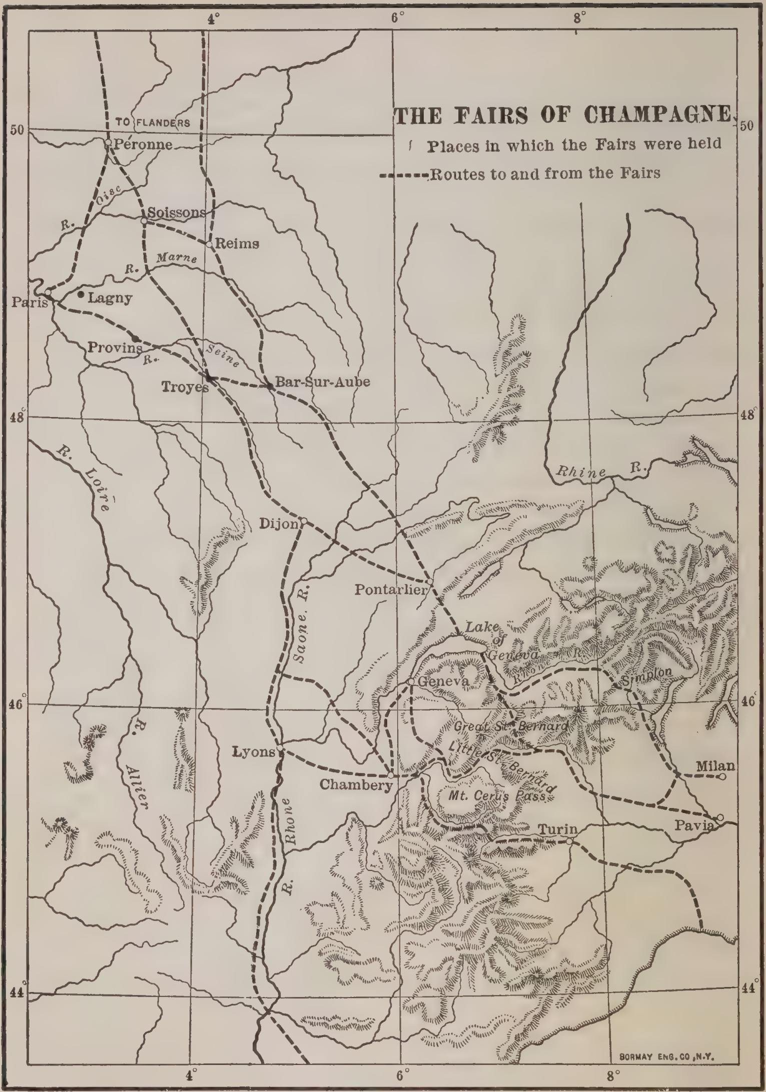
Every person with wares to sell seeks a purchaser who desires those particular wares and who will give him in exchange something that he himself desires. Nowadays, for instance, a farmer brings his country products to the city, seeks out a produce merchant who will give him money for it, makes his purchases at the dry goods store with the money, and returns contented; he has exchanged his surplus for what he lacks. If there is no special store where he can sell his produce he must seek out buyers by going around to the separate houses, and if there is no general store where he can make his purchases he must again hunt up the individuals who make or sell what he desires. Where exchange is still relatively rare it may be a very troublesome process to find the buyers and sellers of particular wares, and the following device has almost always been adopted to meet the difficulty; people who desire to trade agree to meet at a certain time and place, so that there will be every chance that buyer and seller will find each other and secure that coincidence of supply and demand which exchange implies. The current of trade is dammed for a time as it were; then allowed to flow in much greater volume for a little while, then dammed again.

72. Comparison of fairs with markets and modern exchanges. — Even now the old custom of "market days" persists in some places, and once it was universal; townspeople and country people agreed on a certain day, and met in the market-place then to exchange their wares. A fair is the same kind of institution as a market, and grew up for similar reasons, but it represented a further step of development, for it attracted buyers and sellers from a far greater area, and served the needs of wholesale as well as retail trade. The fair is, of course, much less advanced than the modern exchanges (stock and produce), from the fact that it was intermittent instead of being continuous, as well as for other reasons; but in the Middle Ages it was the means by which commerce grew strong, and the prosperity of commerce could be measured by the prosperity of fairs.

The fairs always attracted people for social as well as business purposes; life in the Middle Ages would be regarded as insufferably dull at the present time, and both townspeople and country people enjoyed the excitement which the fair brought with it. There were "side-shows" in plenty, then; wild animals, trained dogs, and monstrosities, poets and musicians, actors and clowns, dancing and gambling halls; and there was a good opportunity to turn a penny dishonestly as well as honestly. The court roll of the English fairs of St. Ives tells us of a defendant who was caught selling a ring of brass for 5½d., saying "that the ring was of the purest gold, and that he and a one-eyed man found it on the last Sunday in the Church of St. Ives, near the Cross."

73. Privileges of merchants trading at a fair. — The fair ordinarily grew up under the protection of some feudal lord, secular or ecclesiastical, who endeavored in every way to further its growth that he might increase his revenue from the taxes he imposed on it. The lord of a fair endeavored to attract merchants by guaranteeing them protection on their way, and there were many cases in which the lord took up the cause of merchants of his fair who had been robbed or maltreated by others, and forced restitution. Furthermore, he endeavored to secure exemption from tolls for wares on the way to his fair, and sometimes merchants on their way to a fair were freed from the attachment of the person for debt. Inside the fair a freedom of trade was allowed which was unusual at the time, and various special privileges were granted the merchants. The most important of these was a special court in which cases of breach of contract and the like could be tried. It was called the Court of Pie Powder (Pie, French *pied,* foot; *curia pedis pulverizati,* court of dusty foot) from the dusty feet of the merchants, or, as some said, because justice was done as speedily as dust would fall from the foot. At any rate this court did give a rough and ready means of settling commercial disputes by referring them to a committee of traders, which was highly prized because commercial law was still in its infancy, and no justice could be looked for in a manorial or a feudal court.

74. Great fairs in Europe. The fairs of Champagne. — It would be possible to give a long list of fairs, for every country of Europe had them in varying number at different times. The oldest was probably that of St. Denis at Paris, which may have been founded (as its patrons alleged) in the seventh century, and which was certainly in active operation long before the time of Charlemagne. In a later period another Paris fair, that of St. Germain, became more important, and later still the fairs in the French province of Champagne became the most flourishing in Europe. The prosperity of these fairs was due in part to their geographical position, which made them a natural trade center and distributing point when commerce on land was more important than that on sea, but still more, apparently, to the good government and wise policy of the Counts of Champagne. The Counts gave sufficient protection both at home and abroad, maintained regular and reasonable dues, and did everything to stimulate the confidence of the merchant class. They got an enviable reputation by their strictness in forcing the proper execution of contracts made at the fairs, and took such precautions to assure the payment of debts contracted there that



Most of the traffic of the Champagne fairs went North and South, by way of Flanders and of Italy. Merchants from Normandy ascended the river Oise to its junction with the land route. The route of German merchants is unknown, but most of them probably went by way of Bruges.

some merchants (or bankers) went to the fairs simply to loan money.

75. Trade at the Champagne fairs; other continental fairs. — In the thirteenth century, the period of their greatest prosperity, six fairs were held at different places in Champagne, of which Troyes and Provins, southeast of Paris, were the most important. Each lasted over six weeks, and, following in rotation, they supplied an almost continuous market. Here one might find all the wares which formed the objects of commerce in Europe; textiles of silk, wool, and linen; minor manufactures and jewelry; drugs and spices; raw materials like salt and metals; leather, skins, and furs; foods and drinks, live stock and slaves. The bulk of the trading was done by merchants from various parts of France and Flanders (modern Belgium) and by Italians who came up over the Alpine passes; there were also Germans and Spanish, and, in less number, English, Dutch, and Swiss. Wares came from more distant countries, Scandinavia and the eastern Mediterranean, but changed hands on the way.

The fairs declined as heavier dues were imposed, and especially when Champagne was brought directly under the French king, about 1300; wars diverted the merchants from Champagne to Flanders, and the growth of sea-trade favored this same movement. The Champagne fairs dwindled to insignificance, and their place was taken by the fairs of Bruges and Cologne, of Frankfurt on the Main, Geneva, and Lyons.

76. English fairs. — England was near the circumference of trade in this period, instead of being at the center as it now is, and its commerce was not so highly developed as that of some of the Continental countries. The English fairs, therefore, were of less importance, and in most cases did not attract merchants from distant countries. The largest English fair was Stourbridge Fair held about a mile from Cambridge, in an excellent position for trade with the low countries across the Channel, and for the distribution of goods through the thickly populated districts of England. Another great English fair was that of Winchester, held each year for sixteen days, beginning on August 31st. "The hill-top was quickly covered with streets of wooden shops; in one the merchants from Flanders, in another those of Caen or some other Norman town, in another the merchants from Bristol. Here were placed the goldsmiths in a row, and there the drapers; while around the whole was a wooden palisade with guarded entrance, — precautions which did not always prevent enterprising adventurers from escaping payment of toll by digging a way in for themselves under the wall. . . . All trade was compulsorily suspended at Winchester, and within a 'seven-league circuit,' guards being stationed at outlying posts, on bridges and other places of passage, to see that the monopoly was not infringed. At Southhampton, outside the circuit, nothing was to be sold during the fair-time but victuals, and even the very craftsmen of Winchester were bound to transfer themselves to the hill and there carry on their occupation during the fair. There was a graduated scale of tolls and duties; all merchants of London, Winchester, or Wallingford who entered during the first week were free from entrance tolls; after that date newcomers paid tolls, except the members of the merchant gild of Winchester."

QUESTIONS AND TOPICS

1. Following the reasons given in sect. 71 to explain the rise of fairs, show why they have declined in recent times. What effect will the extension of railroads and the development of trade between Asia and Europe have upon the fairs of Nijni Novgorod?
2. Set down all the points of likeness and of difference, so far as they occur to you, of: market, fair, produce or stock exchange.
3. Study the history of fairs in your own State. Did the "county fair" once have more economic importance than it has now?
4. Does a modern stock-exchange seek to attract customers by offering guarantees of special security, as in the case of fairs? [Study the rules of the exchange, and the pains taken to secure honesty and solvency of members.]
5. Study, on a good map, the advantages of location (transportation by land and water, nearness to advanced commercial people) of the Champagne towns; of their successors in commercial importance.

6. Indicate on a sketch map of England the position of medieval fairs. [See the index of Cunningham or Ashley]

7. Write a report on English fairs in the Middle Ages [same reference.]

8. Write a report on one of the following topics:

(*a*) The great fairs of Europe. [Horne, Harper's Magazine, vol. 46, p. 376.]

(*b*) The fair of Nijni Novgorod. [T. Child, Harper's Magazine, vol. 79, p. 670.]

(*c*) Kentucky fairs. [James Lane Allen, Harper's Magazine, vol. 79, p. 553.]

BIBLIOGRAPHY

Gross, Sources, has no separate section on fairs, but includes a number of books on them, to be found by consulting the index. A bibliography will be found also in the article ** Fairs, by John Macdonald, in the Encyc. Brit.; this article can be heartily recommended to teacher and student. For modern fairs see Poole's Index of Periodical Lit. Bourne, Romance of trade, devotes chap. 3 to fairs.

CHAPTER IX

SEA TRADE

77. Rise of sea commerce. The Scandinavians. — We might suppose, in view of the difficulties and dangers of travel on land, that the trade of Europe would have been forced to the sea during the feudal period. In the last two centuries of the Middle Ages there was, in fact, a growth of maritime commerce which prepared the way for the great discoveries and the oceanic period of modern commerce. Before this period, however, the means of navigation were still so slight that regular and extended commerce on the sea was the exception rather than the rule.

In Northern Europe the Scandinavians were the leaders in the development of navigation. We get an idea of the ships that they used from one which was discovered a few years ago in a burial mound in southern Norway, where it had been preserved since the ninth century, it is supposed. It is an open boat, clinker built, and fashioned to go in either direction; it is about 75 feet long, and has places for 15 oars on each side, but no arrangement for a sail. Similar boats, with the addition of a rudder and hutch at each end, are still used in the Lofoten Isands. They are well suited to carry passengers along the coast, but have small cargo capacity, and, of course, are unfit for long sea voyages. The Scandinavian Vikings, indeed, used them mainly for raiding and piracy, and in them harried for centuries the coasts of western Europe, with a recklessness which accorded with their warlike character. A chronicle speaks of Danes who were tossed about for nearly a month before they made their landing in England. Along with these war vessels the Scandinavians must have had some cargo-ships, the details of which are unknown to us; a modern writer conceives them to have been clumsy and slow, "tub-shaped, round-bowed, and flat-bottomed." Sailing ships were certainly used from a very early period.

78. Development of shipping in Northern Europe. — The Bayeux tapestry, which pictures the events of the conquest of England by the Normans in 1066, shows what was substantially the Viking type of vessel to have been used in that expedition; the boats were undecked, and several foundered at anchor before starting. A modern writer thinks that few were over 30 tons in size, and that none carried over 40 or 50 men. About two centuries later the seals of Sandwich and Dover show a ship still undecked, but provided with a rudder working over the side, fighting platforms at bow and stern, and a mast with a crow's-nest at the top. It is doubtful how far we can trust representations such as these on the tapestry and seal, which were often executed by persons unfamiliar with the object and were sure to be conventional. We can, if we choose, follow the statements in the chronicles, which would make the ships much larger, holding a hundred men or even several hundred; the chronicles are notorious, however, for the constant exaggeration in matters of statistics, and the truth lies probably somewhere in between our two sources of information. Down to the fifteenth century the single mast with the square sail was the usual rig. Some vessels, however, carried two masts, one near the center and one toward the bow, and could spread six sails. For shorter trips and for the coasting trade smaller boats were used, sometimes propelled only by oars.

79. Development of shipping in the Mediterranean. — Navigation developed more rapidly in the Mediterranean, especially after the beginning of the Crusades, than in northern Europe. It is hard to believe the statements according to which the Mediterranean ships carried 1,000 or even 1,500 pilgrims, after all allowance is made for the crowding which would be permitted at this time, but the Mediterraenan ships undoubtedly surpassed others in size and equipment. Venice presented to France in 1268 some ships which measured 110 by 40 feet, which were 11½ feet deep in the hold and had a height between decks of 6½ feet. These ships carried a complement of over 100 men, and must have measured 400 or 500 tons, while English ships of the period rarely exceeded 50 or 100. Mediterranean shipping regulations of about this date show advanced ideas concerning the construction, the equipment, and the loading of ships; all ships were inspected and none could sail which did not comply with the regulations.

The ship-builders of the Mediterranean ports retained the type of the classical galley, depending mainly upon oars for its propulsion. The hull was much longer than in the northern type of sailing ships and did not rise far above the water; both characteristics depended on the need of placing the oarsmen where they could work to advantage. The three square sails were a comparatively late improvement on the earlier rig, which consisted ordinarily of one sail; a fair wind was utilized for helping the boat on its course, but the chief reliance was placed on the oars.

80. Backwardness of the art of navigation. — The control of a ship is as important as its construction, if it is to serve commerce, and the growth of maritime commerce in the last centuries of the Middle Ages was due as much to improvements in the art of navigation as to superior ship building. During the early Middle Ages, as in ancient times, ship captains took their lives in their hands when they ventured out of sight of a familiar coast. The only means they had for determining their position at sea was "dead-reckoning," *i.e.*, estimating the distance that they had traveled from a known point, and the course that they had steered; and to know their course they had to rely upon the stars, which of course were obscured in stormy weather, when their help was most wanted. It was customary, on voyages in the open sea, to sail due north or south to the parallel of the destination, then to turn at right angles and sail due east or west; errors in the course of 8 or even 10 degrees were not uncommon. The means of fixing the course in any weather, the mariner's compass, which was discovered by the Chinese, and is supposed to have been known to the Arabs at this time, was still unknown in Europe.

81. Introduction of the compass, and of navigators' directories. — The first documentary evidence of acquaintance with the compass in the West dates from a little before 1200; and within fifty years we find it mentioned in nearly a dozen different places, both in the North and South of Europe. It has been suggested that Mediterranean sailors may have been the first to learn of the compass, from the Arabs, but that they could not use it in its early form of a magnetized needle floated on water by a rush or cork, because of the choppy seas; later the needle was balanced, as at present, on a point. In 1300 the compass was in general use. It is possible to exaggerate its importance as a cause of the great maritime explorations; for without it the Northmen had made their distant expeditions to the North and West, and with it the Portugese crept along the west coast of Africa only slowly and timidly for a considerable period. As a means to regular navigation, however, it was indispensable; and the great extension of commercial voyages in the last two centuries of the Middle Ages is inconceivable without it. Medieval types of "sailing directions" now came into use; these were manuals telling the sailor about the coast, the tides, the bottom, and other features of the route he was to traverse. One of them, written probably before 1400, covered the whole West of Europe from Spain to the mouth of the Finnish gulf, enabling the mariner who was provided with a compass (used for determining the time of tides) to navigate the coast with a fair degree of safety.

82. Limits of early trading voyages. — Maritime voyages were made to suit the conditions of the time. In the first part of the period under discussion (say before 1300), they were attempted only for short distances and in the part of the year when severe storms were rare. "To sail after Martinmas (November 11) is to tempt God," writes an old chronicler;

and in the early days of the Hanseatic League there was a regulation by which ships were not to sail after November 11, and were to be in port if possible before that time. Some time afterwards an amendment was adopted which allowed ships laden with beer, herrings, or dried cod to sail as late as December 6, because the cargo was perishable or was needed for the Lenten market. The extent of the voyage was at first short. The sailors of Bordeaux would go as far as the coast of Brittany and Normandy; the Normans would go as far as England and Flanders; and so the chain of voyages was kept up.

83. Medieval seaports; contrast with modern. — Vessels were so small that they needed no great depth of water in their harbors, and could ascend rivers for a considerable distance. So the English town of Bawtry, lying on the little river Idle, which flows into the Trent, which flows into the Humber, which flows into the North Sea, was called in an official document "the port of Bawtry"; and the town of York, situated on the river Ouse, another branch of the Humber, claimed the right to share in wrecks at sea, as though it were on the seaboard. Ports of this kind were actually preferred to those on the coast which form the great harbors of modern times, for they gave access to the interior markets without the expense of land transportation, and they offered better security not only against tempests but also against pirates. Towns like Rouen on the Seine, Nantes on the Loire, Bordeaux on the Garonne, Narbonne and Aigues Mortes ("Dead waters"), on lagoons of the Mediterranean coast, were the great French ports of the early period.

84. Decline of medieval seaports in later times. — Occasionally a medieval port would keep its importance later; from the list above we can select Bordeaux, and there are a number of other examples in Europe — London, Antwerp, and Hamburg, for instance. Often, however, the port was superseded by another on the same river but nearer the sea; the trade of Rouen went to Havre; the trade of the Humber river system has gone to Hull; the commerce of Bremen has gone to Bremerhafen. The town of Bruges, in Flanders (modern Belgium), once the most important port in Europe, is situated at a distance of seven miles from the sea, and this might be seven hundred as far as its present oceanic commerce is concerned. Its trade has been taken by seaports giving easy access to large vessels; in the same way the trade of Narbonne and Aigues Mortes has passed to Marseilles.

85. Development of maritime commerce; persistence of medieval ideas. — After about 1300 the distances covered by sea voyages grew much greater. Galleys were sailed and rowed from Venice all the way to Bruges, and met there vessels from the far North and East of Europe; English sailors traded regularly with southern France, Spain, and the Scandinavian countries. The expense of transportation by sea, however, was still great. The price of spices was in Bruges two or three fold what it was in Venice; and English wool transported to Florence sold there for two to twelve times as much as it brought at home. It is hard for us, in modern times, to realize such facts, but the student should note them carefully, for they go far toward explaining the slight development of commerce even in the latter part of the Middle Ages.

The high cost of transportation is itself a fact demanding explanation. Inefficient ship-building and navigation would account for it in large part, but other factors are still to be considered. These distant voyages were carried on in the face not only of real dangers serious enough, but also of far greater dangers imagined by ignorant and credulous men. An English chronicler says that in 1406, when English ships were going to Bordeaux, they entered an unfrequented sea, and four vessels from Lynn were engulfed in a whirlpool which swallowed up the flood and vomited it forth again three times a day. The Arabian Nights have been called sober and realistic in comparison with the ideas held by the medieval mariner of the wonders and dangers of the unknown parts of the world.

86. Piracy. — At sea, as on land, the merchant faced dangers of violence which were probably as serious an obstacle to the growth of commerce as the physical difficulties of navigation. Ships went always armed, and sailed when possible in fleets for better protection. Sometimes one that had ventured out alone could beat off its enemies, as in the case of a trading ship from Stralsund which was attacked in 1391 but won a complete victory, and brought back (it is said) 100 pirates, packed in casks with only the heads sticking out, for a bloody punishment. Pirates came from every source. An ordinary merchantman would turn pirate if it met a weaker vessel from some town which was so far distant or so weak that reprisals need not be feared. A mariner of Winchelsea in England, who had seized and plundered a vessel owned by Dorsetshire merchants, became mayor of Winchelsea a few years later, and in the fifteenth century a Canterbury abbot was convicted of plundering a wine ship and was forced to make restitution. Even ships sent out by the public authorities for protection against pirates attacked and plundered ships not only of other nationalities but of their own too. Six ships which had been organized in 1316 to protect Berwick from freebooters harried the English coast to the south, and the fleet of the Cinque Ports (five towns on the English Channel), used its spare time in preying on English commerce and attacking English towns.

87. Organized piracy; privateering. — Piracy became a regular profession, in which partners organized for greater efficiency. The "Victual Brothers" formed an organization, modeled after that of the Knights Templars, for carrying on piracy; their motto was "God's friend and all the world's enemy." They had a stronghold at Gotland, in the Baltic Sea, and were long a terror to traders and fishermen; their power was broken in 1394 only by a fleet of thirty-five ships sent against them. A fleet of Venetian galleys on their way north were attacked off Lisbon in 1485 by a piratical expedition of six ships, which killed and wounded over four hundred men and took enormous booty; it is said that the discoverer

Christopher Columbus was one of the corsairs. War at sea was carried on even more barbarously than war on land. Crews and passengers of captured merchant vessels, whether taken after resistance or not, were frequently tossed overboard, sometimes with their hands tied behind their backs, or were hung to the yards, or murdered on the deck in cold blood.

An appearance of legitimacy was given to the attack on merchant vessels in time of war; "letters of marque" were not considered necessary to justify attacks by private vessels against merchant vessels of the enemy, and as war was the rule rather than the exception in Europe privateering was nearly constant. During the Hundred Years' War between England and France, in spite of booms and chains, watches and beacons, almost every town on the south coast of England was sacked and burnt by French privateers. Even at London the streets which opened on the river were defended by chains, to hinder a landing within the city, and the people thought of building high stone towers on both sides of the river, with a chain stretched between them, to defend the shipping from night attacks.

QUESTIONS AND TOPICS

1. Ships and exploits of the Vikings. [Beazley, Prince Henry, chap. 2; C. F. Keary, The Vikings in western Christendom, N. Y., 1891, chaps. 5, 6, 9.]

2. In connection with the small vessels of the early Middle Ages the reader is reminded of the exploits of various "captains" of the present day who cross the ocean alone, and he might profitably hunt up a description of one of the boats employed and compare it with the description in the text. A ton is 100 cubic feet of internal volume.

3. If the reader lives at a trading port he should ascertain the tonnage and rig of the vessels ordinarily employed, and thus prepare himself to understand the conditions of medieval navigation.

4. Compare the medieval galley with the ancient galley described in classical histories. [Beware of pictures given in the text-books; many are pure products of the imagination.]

5. Write a report on the history of the compass. [Encyclopædia Britannica; consult Poole's Index for articles in recent periodicals.]

6. Measure distances in sect. 82, and apply them to the sea- or lake-coast of the U. S.

7. Indicate on an outline map of Europe the position of the ports named, in sect. 82, using the conventional signs of death (†) and birth (*) to show those that declined and those that gained in importance.

8. Write a report on the credulity of early sailors. [Voyages of Sinbad the Sailor in the Arabian Nights, a popular romance of the Indian trade in the ninth century; Voyages of Sir John de Mandeville, N. Y., Macmillan, 1900, $1.50; Selections in Cassell's Library, paper, $.10.]

9. What is the difference between a government war-vessel, a privateer, and a pirate? [Dictionary and encyclopedia, or some manual of international law.]

BIBLIOGRAPHY

Articles and bibliographies by * Clowes in Traill's Social England; John Fiske, * Discovery of America; Alice Law, Notes on English medieval shipping, in the Economic Review, 1898, vol. 8; Cornewall-Jones, The British merchant service; Lindsay, History, vol. 2.

CHAPTER X

THE LEVANT TRADE

88. Wares of the Levant trade. Slaves. — The "colonial products" of the modern world (tea, coffee, spices, etc.) have familiarized us with a class of wares which cannot be produced at home and are imported from distant countries. In the commerce of medieval Europe there were wares like these which could not be produced near the place where they were to be consumed, because of the severe climate, or the lack of technical skill, and yet which were eagerly desired by the upper classes. These wares were obtained from Asia, and formed the basis for an Oriental trade which was one of the most important branches of medieval commerce. There was one ware of Oriental trade in which there was a reciprocal exchange; this was slaves. Slaves were exported from Europe to the great market at Cairo in Egypt, and were imported from western Asia and Africa. At the very end of the fifteenth century there were said to be 3,000 slaves in the single city of Venice. Most of the wares, however, flowed in only one direction; and to give an idea of the character and importance of the trade we shall preface our narrative of its development by a description of the chief products imported into Europe.

89. Spices. — Among the raw materials a very important place was taken by spices, the product of tropical plants and trees which thrive only in a few parts of the world even now. The food of the common people in the Middle Ages would seem intolerably coarse and monotonous to a modern laborer, on whose table appear regularly products from all parts of the world; and even the diet of the rich needed a great deal of condiment if it was to be palatable. A staple import, then, was pepper, the berry of a vine growing in India and in the islands of Asia, which was used in Europe by all who could afford the luxury of a seasoning. For common use the price was prohibitive. Cloves, from the Molucca Islands, were even more expensive, costing two and three times as much as pepper; they were used for seasoning food and drink, and also as medicine. Cinnamon, nutmegs, and mace served similar purpose, and ginger took a place among medieval luxuries of this kind second only to pepper.

90. Drugs; perfumes; sugar. — Beside the spices which were employed in medicine by medieval apothecaries many wares were imported which served solely or mainly for drugs. Among them were rhubarb, aloes, balsam, borax, gum tragacanth, gum benzoin, cubebs, cardamoms, camphor, etc.

Sugar belongs in this list of wares, on the border-line between medicines and table delicacies. It was far too costly to be an article of common consumption, and the gift of a small piece of loaf sugar implied far more devotion than would be evidenced now by a present of the finest confectionery. It found its main employment in medicine, therefore, and though it was used in increasing quantities for sweetening food and drink and for preserving, native honey was the medium commonly used.

91. Precious stones; preponderance in general of luxuries over articles of general utility. — Another category of wares, which found a ready market among the upper classes of medieval Europe was precious stones. The part of Europe which now produces a considerable quantity of these, the region of the Ural Mountains, was still unexplored; the source of supply in the New World was of course unknown; and Europe looked entirely to Asia and Egypt for its supply. Diamonds, emeralds, rubies, sapphires, lapis lazuli, etc., were collected in various parts of the East, passed through innumerable hands, and finally found a resting-place among the jewels of some great lord or lady of the West. Pearls came from the Indian Ocean, and ivory from Africa, through the hands of Asiatic traders.

Europe was able to make a return in kind from the Mediterranean coral fisheries; the greater part of European coral was exported to meet the demand in the East, being carried to Egypt by Spanish or Italian ships, and distributed from there to India and China.

The reader who has followed thus far this category of eastern products must be struck by the preponderance in it of costly luxuries over articles of general consumption. The expenses of transportation over great distances and through dangerous districts were, in fact, so great that most of the Eastern wares had necessarily to comprise great value in a small bulk, and sought their market only among the upper classes of Europe, who could afford to pay well to gratify their desires.

92. Dyestuffs; alum. — Among the raw material brought from the East there was only one important class of wares which served manufacturing industries, the dyestuffs. Indigo (Greek, *Indikon*, Indian) came from the East as its name implies, the chief staple for it being Bagdad. It gives a fast and deep blue and had been imported in Europe even in ancient times; with the revival of commerce after the Crusades it became again an article of commerce, and was used constantly thereafter as a dyestuff, in spite of the attempt to substitute for it the native woad, an herb of the mustard family. Some of the red dyes were produced in Europe, notably madder, mentioned in one of Charlemagne's laws, and the scarlet or carmine obtained from the kermes insect in Southern France and Spain. Both of these dyes were imported to some extent, however, and another red dye which was an important import was Brazil-wood. The name suggests an American origin, but was given it in fact because its redness made it seem like glowing coals (cf. English brazier), and the South American country received its name later from the tree found growing in it. Brazil-wood was brought to Europe in blocks and was then ground up for use in dyeing and painting. A common yellow dye of the Middle Ages, saffron, was also imported when the best quality was desired, and yellow arsenic (orpiment) was used as a pigment. Lac (shellac) was used for a dye as well as for varnish. More important than any of the separate dyes was alum, which came to be regarded as indispensable for fixing the color when wool or silk had been dyed in the piece. This was procured mainly in Asia Minor, and was one of the most highly prized products of the eastern trade.

93. Other raw materials of industry. — In comparison with the dyes most other raw materials of industry were unimportant as objects of trade. Cotton (Arabic *kotn*) was imported both in its finished form and as a raw material. The cotton manufacture in Europe had, of course, nothing like its present importance, but it was already well established in Germany, where a staple cloth was made out of a mixture of cotton and flax, and it required more of the raw cotton than the plantations of southern Europe could supply. Small amounts of flax were imported from Egypt, because of the superior quality of the product.

Silk was, however, the only textile material which was a very important ware in its raw form. The culture of the silkworm, which had been carried on for centuries in China, but so far as possible had been kept a secret from other peoples, spread gradually to the West and was introduced into Europe by the Emperor Justinian in the sixth century. The Arabians introduced mulberry plantations and the raising of silkworms into Sicily and Spain, and the culture thrived so far as to leave a surplus for export after supplying the home manufactures. Christian peoples, however, did not succeed so well in the culture; France could as yet furnish no appreciable quantity of raw silk, and the output in Italy was unsatisfactory both in respect to quality and quantity. The growing silk manufacture in Europe had therefore to meet its deficiency by trade with the East, getting part of its supply of raw material from China and Persia, but the bulk from the countries about the Caspian Sea.

94. Textile imports; exports from Europe. — Among manufactures imported from the East textiles held the most important place. Europe was strong enough in the manufacture of linen and woolen goods to export them in considerable quantities to Asia, but it lacked in the manufacture of cotton and silk not only raw material but the technical skill to compete with the artisans of the East; and imported large quantities of finished cloth. Dignitaries of the church and the merchant princes of the late Middle Ages demanded for clothing and for furniture fabrics of finer quality and of greater quantity than the looms established by the Mohammedans in Spain and Sicily could supply, and sought them chiefly in the countries bordering the eastern end of the Mediterranean. From this district came a great variety of silks, woven often as brocades with gold or silver threads, and the early types of velvet and satin. Silk goods formed the chief but not the sole constituent of the textile imports; with them came fine cottons from India, cloth made from the hair of camels and other animals, and linen from Egypt and Syria, which surpassed all of western make. Europe depended also on the East for fine china and glass.

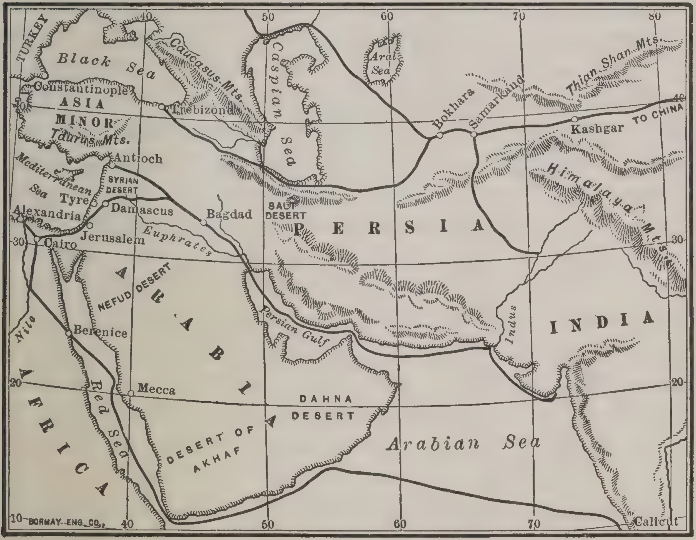
Before the end of the Middle Ages the Italian silk manufacture had grown strong enough to turn the tide, and to export to the East. Through the greater part of this period, however, the only European textiles exported to Asia were the woolens and common linens which were produced in England, Flanders, and other of the more advanced countries. Besides these manufactures the main exports consisted of raw materials: wool, hides, metals (gold, silver, and tin), and food stuffs.

95. Revival of Oriental trade about 1000, under the leadership of Italians. — As commerce with the East had lasted throughout the period of Roman rule, and had cultivated tastes among rich Romans and provincials which could only be satisfied by its continuance, we find evidence even in the Dark Ages that it was still carried on. A document dated 716 shows that the rich monastery of Corby in northern France received pepper, cloves, and other spices from southern France;

and Marseilles maintained its commercial relations with the East. The trade in this period, however, was carried on almost entirely by Syrians and Jews; the peoples of western Europe had not yet learned to profit by active participation in it, and it had sunk to comparative insignificance. The revival came about the year 1000 with the general awakening of economic life in Europe which had for its most striking feature the growth of towns. As the possibilities for trade became greater, and the demand for luxuries kept pace with them, the eastern trade felt a powerful stimulus, and grew rapidly in importance. It was now carried on mainly by the people who were destined to control it until the great discoveries left them outside the path of progress, — the Italians. A group of towns in the far south of the Italian peninsula, Bari, Trani, Brindisi, and Taranto, took advantage of their nearness to the Levant (the eastern end of the Mediterranean) to establish commercial relations which returned large profits and developed into a considerable trade. Another group of towns near the Bay of Naples, of which Amalfi was the chief, shared in the profits of this trade, and still another town, standing alone near the head of the Adriatic Sea, Venice, began already to assume the commanding position in the Oriental trade ~~which~~ she was destined to make good against all rivals.

96. Routes between Asia and Europe. — The main routes serving as the paths of trade between Asia and Europe during the Middle Ages were three in number. The central route, the oldest and for much of this period the most important, began at the head of the Persian Gulf; after the foundation of Bagdad near the site of ancient Babylon (about 750 A.D.) it found there its first important stopping-place. Thence a caravan route led around and through the desert to Damascus, where it branched off to the coast of ancient Phœnicia in one direction, to Egypt in the other. Aside from partial interruptions this route was used steadily until near the close of the Middle Ages, when it was partially blocked and commerce was forced to the south.

The southern route, reaching Europe through Egypt, was mainly maritime. It had to contend with two great difficulties: the great stretch of open water presented by the Indian Ocean, and the difficulty of navigation in the Red Sea, on the west coast of which strong north winds blow through much of the year. The first of these difficulties became less serious in the Christian era, as navigators learned to time their voyages to suit the monsoons, the winds blowing at regular seasons in the Indian Ocean. Vessels could leave an Egyptian port in July and reach India by the southwest monsoon in little over two months. The second difficulty was obviated by starting for the East not from the Gulf of Suez but from a point part way down the coast (Berenice), reached by a trip on the Nile and by caravan. This route became of greatest importance at the close of the Middle Ages.



TRADE ROUTES BETWEEN ASIA AND EUROPE

The map shows only the chief lines of trade, omitting side routes for the sake of clearness. See the text, sect. 96, for description of the uses to which the routes were put.

The third route, entirely overland, led from India across the mountains to the River Oxus, where it was joined by a caravan route from China. Branching near Bokhara, one part led to the Caspian Sea and up the Volga, another left the Caspian to the north and reached Europe at the Black Sea (Trebizond, Constantinople). This route traversed high mountain passes and long desert stretches, and was suitable only for the carriage of valuable articles of small bulk. For about two centuries after 1250 it was kept open by the Mongols or Tartars, who lived on good terms with the Christians; then it was blocked by the Turks.

97. Character of the crusades; number of crusaders. — To assign to economic motives the chief part in the crusades would be a distortion of the great movement which marked the life of Europe in the two centuries following 1100. Not hope of gain but vague ideals of this life and the life to come drove hundreds of thousands of men to the perilous journey to the Holy Land from which so few returned. Indirectly commerce had its share in this movement; it had drawn the peoples closer together, stimulated curiosity and broadened interests. Men sought an outlet for their surplus energy, and a relief from the monotony of medieval life; ascetic ideals imposed upon them holy tasks which they could fulfil to the benefit of their souls. The effect can be traced in an increase in the pilgrimages of individuals to holy places. The people of Europe needed only organization and a leader to unite their scattered forces; they found their organization in the church, their leader in the Pope and his delegates, their goal in the delivery of the Holy Sepulcher from the hands of the infidels who were abusing Christian pilgrims.

Any estimate of the numbers who engaged in the crusades must be pure guesswork. The statistics of medieval chronicles, always notoriously inaccurate, seem to reach the acme of unreliability in the figures of the crusaders engaged in the different expeditions. The main body of the first crusade, which started in 1095, was compared in number with the sands of the seashore or the stars in heaven; even moderate contemporaries made it 600,000 or at least 300,000 strong; perhaps it was really 100,000. There were six or eight separate expeditions lasting down to 1270, and we may say that a million men, roughly speaking, and probably many less rather than more, took part.

98. Commercial aspect of the crusades. — Even the transportation of this number of men, with their baggage and equipment, must have been a great stimulus to the growth of Mediterranean shipping. The first crusade went almost entirely by land, but the sufferings and losses were so great that crusaders were driven to the sea route, and this became gradually the regular way of reaching the Holy Land. Italian merchants accompanied the expedition from the beginning, not as real crusaders but as contractors for transportation and supplies, turning both the needs and the successes of the crusaders to their commercial profit. A fleet from Genoa and Pisa accompanied the first crusade along the coast of Syria, selling provisions. The Venetians waited until Jerusalem had been taken; then fitted out a fleet which fought the Pisans, quarreled with the Greeks, and in return for very slight services rendered to the crusaders demanded that in every city captured they should have a market, church, and freedom from taxes. "Whilst the warriors of Christendom were fighting for glory, for kingdoms, or for the tomb of Christ, the merchants of Venice fought for counting-houses, stores, or commercial privileges." "The other crusaders obeyed the new impulse, the Venetians utilized it."

The fourth crusade, starting soon after 1200, was fairly captured by the Venetians and turned into a commercial expedition for their profit. When the time for starting came, the feudal knights, improvident as ever, could not pay the sum agreed on for their transportation, and Venice used her power over them as debtors to force them to aid her, first to capture Zara on the Adriatic, a Christian city but a commercial rival, then to take Constantinople itself, the key to the trade of the Black Sea. The crusade accomplished nothing against the infidels; it was merely a means by which Venice built up her commercial and colonial empire at the expense of other Christians.

99. Effect of the crusades on knowledge of the East and of eastern wares. — Aside from the help which the crusades gave the Italians in building up their fleets and in establishing trading posts or colonies in the East, they were of no less importance in extending the market for eastern wares in Europe. The crusaders lost their provincialism, and acquired new fashions (shaving the beard and bathing); they became acquainted with fine stuffs and dyes and were no longer satisfied with the coarse products of home. The European vocabulary was not large enough to give names to the new acquisitions, and we can trace back to this period many words which were borrowed from Arabic, the common language of the Mohammedans: alcove, sofa, mattress, talisman, elixir; many of commercial significance, bazar, tariff, corvette, barracks. Not only the words but the things themselves became native in many cases; the crusades spread in Europe the cultivation of the lemon, apricot, watermelon, rice, and sugar cane. European literature described the marvels of the Orient, the silks of Syria, the tapestries of Persia, the precious stones and perfumes of Arabia; the names of eastern countries became familiar and knowledge of geography widened rapidly.

QUESTIONS AND TOPICS

1. Selecting any one among the more important wares, sects. 88–94, write a report on its production, uses, value, and history as an article of commerce. [Encyclopedia; commercial geographies; encyclopedias of commerce and of manufactures, as those by McCulloch, Waterston, Homans, Ure.]

2. Taking British India as a characteristic source for the Eastern wares, contrast the exports then and now. [Statesman's Year-Book, index, India, exports.]

3. What seaports of those named in sect. 95 are still of importance? [Statesman's Year-Book, index, Italy, shipping.]

4. What evidences have the other ports left of their former greatness? [Encyc.; * Baedeker's guide-books.]

5. Which one of the three routes, sect. 96, is now the most important?

6. What railways have been constructed or proposed along the line of ancient routes? [See a good atlas, and note the proposed railway from Asia Minor through the Mesopotamian valley to the Persian gulf. What effect may this railway have on the importance of Constantinople?]

7. Read a description of one of the ancient centers of trade in modern times. [Consult books by modern travelers in south-western Asia.]

8. Where now can be found pilgrimages like those of the Christians to Jerusalem? What is their commercial influence? [See Mecca in the encyclopedia; and in Poole's Index.]

9. How does the average number of crusaders going per year to Palestine compare with the number of Americans going abroad?

10. Prepare, from descriptions in the current history manuals or from a historical atlas (Droysen's, for example), a map showing the route of each crusade; number each route that the development of the sea-route may be more apparent.

11. Show the development of Venice in the period of the crusades, by comparing her commerce and power at the two dates limiting the period. [References in next chapter.]

BIBLIOGRAPHY

Aside from the current manuals of the history of commerce very little has appeared in English on the routes and wares of the Levant trade. Lincoln Hutchinson, * Oriental trade and the rise of the Lombard Communes, Quarterly Journal of Economics, 1901–2, 16: 413–432 (esp. 415–421), can be recommended; and Cheyney, ** Eur. background, has two excellent chapters on the subject (Levant wares in chap. 1; routes in chap. 2).

The reader will have to rely largely on accounts of the crusades, in which there are incidental references to commerce: Adams,* Civ.; Robinson (* bibliography); Emerton, Med. Eur. (bibliog.); etc.

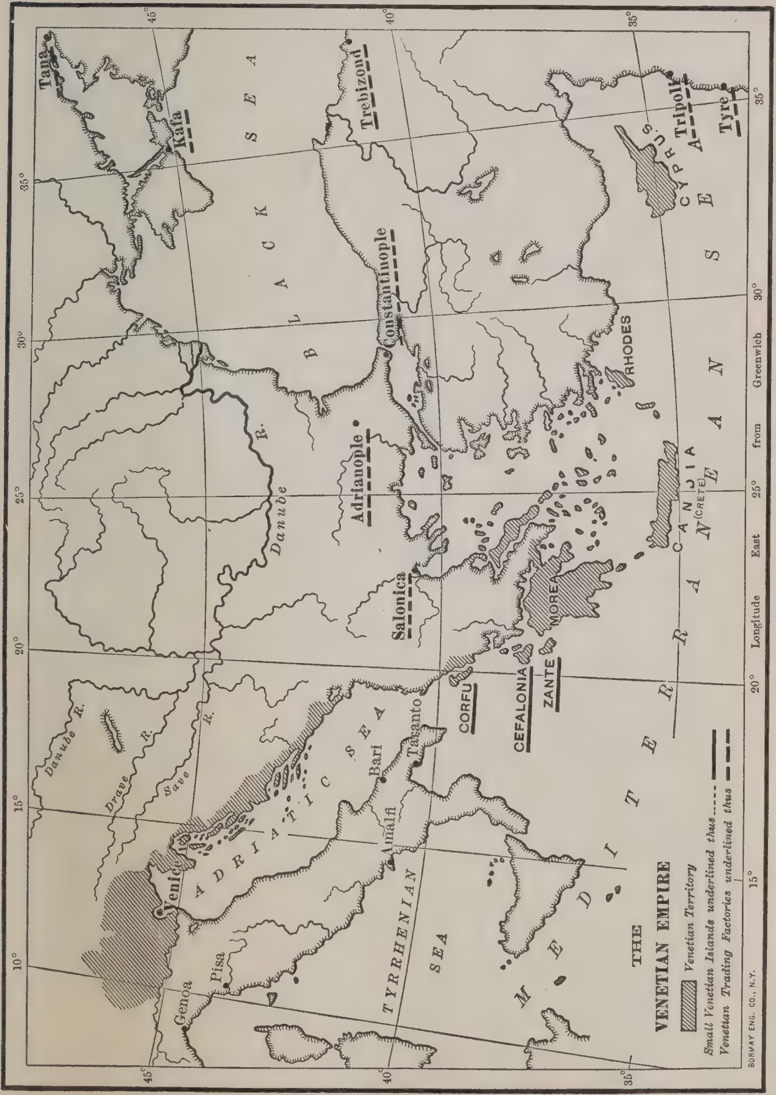
CHAPTER XI

COMMERCE OF SOUTHERN EUROPE

100. Position of Venice; early history. — The course of the eastern trade can best be followed in connection with the fortunes of the city of Venice which still shows, in the splendid palaces lining its canals, the evidence of its former greatness.

The beginnings of the city are traced back to the period of barbarian invasions when fugitives from the mainland sought shelter on the islands a short distance from shore. The inhabitants, thus protected from the unending wars of the feudal period, were at the same time forced to seek their living on the sea, first as fishermen but more and more as merchants. The Italian conquests of the Emperor Justinian (about 500 A.D.), brought them into relations with Constantinople which were maintained by trade and frequent embassies. Even before the year 1000 the Venetians had won a secure position in Constantinople by an imperial charter which granted them, among other privileges, freedom from the vexatious tolls and delays imposed by subordinate customs officers. Still more important was a charter of 1082, which granted lands and buildings in Constantinople for a special Venetian quarter, which freed the Venetians from all taxes and at the same time required their trade rivals, the Amalfitani, to pay taxes to them for the right to trade.

101. Expansion of Venetian empire during the crusades. — Before the crusades, therefore, Venice had a commanding position in the eastern trade. It confirmed this position by a series of bitter struggles with its rivals, especially the cities of Genoa and Pisa which were rising to great prominence. These cities imperiled for a time Venetian control of the Black


THE VENETIAN EMPIRE
▨ Venetian Territory
Small Venetian Islands underlined thus ......
Venetian Trading Factories underlined thus — — —
Tana
Kafa
Trebizond
Constantinople
Adrianople
Salonica
Tripoli
Tyre
CYPRUS
RHODES
CANDIA (CRETE)
MOREA
CORFU
CEFALONIA
ZANTE
Venice
Genoa
Pisa
Amalfi
Bari
Taranto
BLACK SEA
ADRIATIC SEA
TYRRHENIAN SEA
AEGEAN SEA
MEDITERRANEAN
Danube R.
Drave R.
Save R.
45°
40°
35°
10°
15°
20°
25°
30°
Longitude East from Greenwich
BORMAY ENG. CO., N.Y.

Sea trade at Constantinople; but the outcome of the fourth crusade (1204), was a victory for Venice which left her supremacy for the time unquestioned.

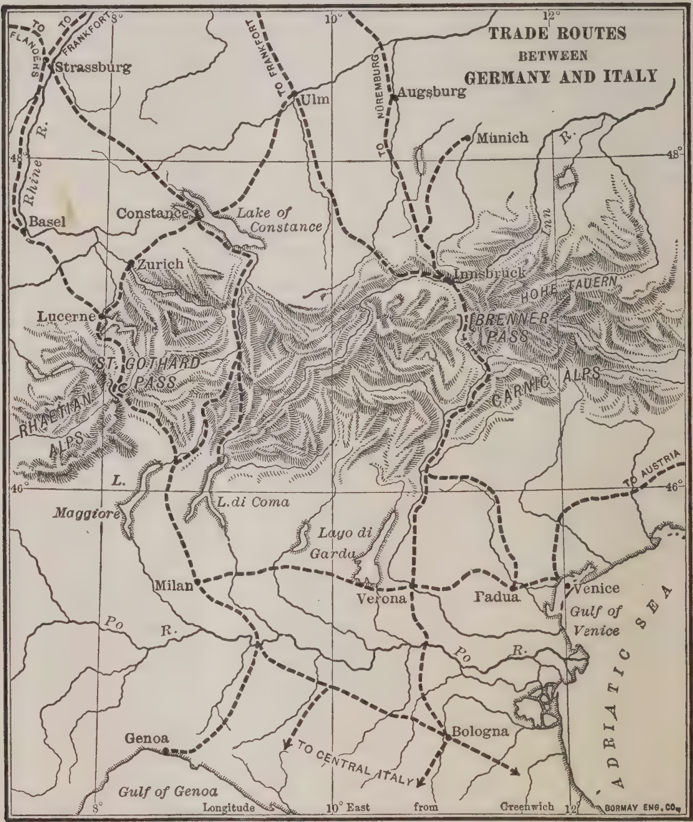
In the share taken by them in the partition of the Eastern Empire the Venetians showed that common sense which is always found at the bottom of all their actions. They left to the crusaders the inland provinces and took for themselves the coast-towns and islands which promised the best commercial returns and were easiest to defend. In Constantinople itself they took a large part of the city, in which their podestat ruled almost as an independent sovereign. At places commanding the all-important sea route to the East, in the Peloponnesus or Morea, in Crete and in Eubœa, naval stations were established under the control of officers sent out by the home government. The strict rules by which these officers were governed gives an insight into the discipline which existed in the Venetian foreign service. In every place in which the Venetians founded a principality their capital was surrounded by Italian colonies; there where one found formerly only nests of pirates, the terror of Venetian commerce, one found now friendly ports, refuges fortified and secure, where Venetian captains and merchants, certain of a good reception, could ask asylum and protection.

102. Extent of Venetian commerce. — Thanks to the colonial empire which they established the Venetians controlled the trade of the eastern Mediterranean more efficiently than Great Britain has controlled the world commerce of the nineteenth century; the field of operations was narrower, and "trade followed the flag" in those early times as it has never done since. Foreigners might trade if they would pay sufficiently for the privilege; without this recognition of their inferiority they were public enemies to be given short shrift.

Venice established her colonies or trading factories not only along the shore of the eastern Mediterranean and the Black Sea; Venetian merchants penetrated deep into Russia, and into Central Asia through the Crimea. So bold were their enterprises that the home government, fearful for its interests, passed a law to limit their extent. "Dalmatia, Albania, Romania, Greece, Trebizond, Syria, Armenia, Egypt, Cyprus, Candia, Apulia, Sicily and other countries, kingdoms and islands were the fruitful gardens, the proud castles of our people, where they found again profit, pleasure, security." The old chronicler names but one side of the equation of trade; the products from all these countries and from the far East behind them were brought to Venice to be exchanged for the products of the West. Martino da Canale says of an earlier period what must at any rate have been true of his own (thirteenth century): "The Venetians went about the sea here and there, and across the sea and in all places, and bought merchandise and brought it to Venice from every side. Then there came to Venice Germans and Bavarians, French and Lombards, Tuscans and Hungarians, and every people that lives by merchandise, and they took it to their countries."

103. Development of the institutions of commerce in Venice. — Reference has been made in an earlier chapter to the Venetian regulations on the building, rigging, and manning of ships, which anticipated by many centuries similar legislation in the countries of northern Europe. The extent of her commercial relations led Venice to a development of book-keeping and banking which made her in these important branches the instructor of Europe, to whom the sons of wealthy merchants in other countries were sent to school. The reader will appreciate how great is the debt of other countries to Italy when he reflects on the number of Italian words having to do with commerce and banking which have become current in general commercial use; among them are conto, conto corrente, porto, risico, disconto, brutto, netto, deposito, folio, bilanza, etc.

104. Venetian commercial policy. — The Venetian commercial policy may be described briefly as the maintenance of as strict a monopoly as possible in the trade east of Italy, and the regulation of trade between Venice and the North or West which would give the Venetians the greatest advantage when they sold their Oriental wares to other Europeans. This policy, as well as the material character of the commerce, can be studied in connection with the two great branches of Venetian trade in Europe, the overland commerce with Germany, and the sea commerce with northwestern Europe.



The different routes varied in importance at different periods, and some routes were used besides those indicated on the map. The Brenner Pass was always of great importance to Venetian trade; the St. Gothard Pass was not opened until the thirteenth century.

105. Overland trade with Germany. — As the Venetians were essentially a sea-faring people, and as it was easier to reach the large cities of central and southern Germany by land than by sea, they took the passive part in their German trade, staying at home and allowing the Germans to come to them for wares. The trip overland from central Germany took roughly two weeks or a little less; trade letters of the fifteenth century were a month or more on the way between Venice and Bruges. Different routes were chosen according to the starting-point of the journey. The chief route was that leading over the Brenner, one of the lowest of the great Alpine passes, lying between Augsburg in Germany and Verona in Italy; but very often the merchant struck off to the East before reaching Verona into the valley of the Drave or the Brenta. Coming from the East, from Vienna, for instance, the Semmering pass was commonly chosen.

106. Strict control over German merchants in Venice. — On reaching Venice the merchant was put at once under strict supervision. He could not choose his own lodgings, but must stay at the "Fondaco dei Tedeschi" (German factory, using that word in its earlier sense of a trading post). This was a building (in its later form a handsome palace now used as a government office) which belonged to the city, and which served at once as a hotel, a warehouse, and an office for controlling the trade. When a merchant arrived he was disarmed and given a room; a careful list was made of all his wares, which served as a basis for the government dues; and an inspector was assigned to him. This inspector acted as an interpreter and as a broker, helping the merchant make his bargains, but it would be a great mistake to suppose that he was appointed mainly to serve the merchant's convenience; his main business was to "shadow" the merchant constantly, to see that he broke none of the numerous regulations designed to assure to the government its dues and to the Venetian people their profits. Germans could bring to Venice only the wares of their own country and of northeastern Europe, because the Venetians wanted to carry on themselves the trade with Flanders; Germans could trade with no other foreigners in Venice, and could not trade even among themselves, in order that the Venetians might have the sole market; they must sell out their whole stock in Venice, without the option of withdrawing part of it and carrying it further. One is tempted to ask why the Germans came to Venice at all, to submit to such severe restrictions. The answer is easy; they had no other place to go to, for the wares they wanted. Thanks to her position and to her skill in trade and war Venice had a monopoly of Oriental wares which enabled her for some time to make what regulations she pleased without fear of losing her customers.

107. Importance of the trade between Venice and Germany. — The German trade in Venice amounted, according to an estimate of the fifteenth century, to a million ducats a year, and the ducat of this period was worth considerably more than the modern dollar. It supplied Germany with the coveted eastern wares which we have already enumerated, and, moreover, with some of the products of Venetian manufactures, which were then highly developed and which were stimulated by protective tariffs. These manufactures included glass, which is even now a specialty of the city, fine textiles, weapons, paper, etc. The Venetian trade, on the other hand, furnished to Germany a market for her metals (gold, silver, iron, copper, lead, tin), furs, twine, rosaries, and manufactures of leather and horn, and the coarser textiles.

108. Commerce by sea with northwestern Europe. — With the countries west of Germany Venice carried on an "active" commerce; that is, instead of waiting for foreigners to come to her she brought the wares to them, as she could well do by the sea route. The crusade of 1204, to which we have already referred as a turning-point in Venetian development, was composed in large part of knights from northwestern Europe, and the relations established then with Flanders, Champagne, and neighboring districts, were continued by trade. The first reference to Venice discovered in English documents is dated

1201, but before the close of the thirteenth century a brisk commerce with England had grown up; at one time in the reign of Edward I over 2,000 sacks of wool were found in the possession of Italian trading companies. The trade followed at first the land route across France, but soon took to the sea, and though the land traffic was never wholly abandoned it became less important and was discouraged by special dues.

109. Regulation of this commerce; the Flanders galleys. — Soon after 1300 the government took charge of this trade and regulated it on principles which were followed for the two hundred years during which it remained important. Separate voyages were, as a rule, prevented, and Venetian merchants who wished to participate in the trade must join in the fleet of "Flanders galleys" which sailed at intervals (usually once a year), as the opportunity for trade seemed favorable. On these occasions the Venetian senate voted a certain number of galleys for the voyage, and auctioned off the right to freight them. Each galley was propelled by 180 oarsmen, and carried for its protection a force of archers commanded by four young patricians who were sent out that in this way they might see the world and learn to serve their native city. The cargo was carried on the account of private merchants, but the supreme control of the fleet was vested in a captain appointed by the Venetian government, and bound to follow its instructions. The voyage to Flanders and back occupied the greater part of a year, as the galleys touched and traded at many ports along the way. The route generally taken included the following stopping-places: Capo d'Istria (Pola), Corfu, Otranto, Syracuse, Messina, Naples, Majorca, the principal ports of Spain and Morocco, and Lisbon. In the English Channel the fleet divided, some galleys going to Southampton or London, others to Sluys (the port of Bruges, connected with it by a short canal), Middelburg, and Antwerp. The chief objective was the city of Bruges, the great market where the trade of northern Europe, in the hands of the Hanseatic merchants, and the trade of southern Europe in the hands of the Venetians, came together.

110. Development of other cities in Italy; freedom and vigor of their policy. — Space forbids the consideration in detail of the history and policy of other Italian cities, of which some rose to the first rank in commerce, though none attained to the greatness of Venice. The lack of a central government in the peninsula enabled each city to frame its policy solely with an eye to its own interests. The Italian cities were able to free themselves from the laws and customs that had been necessary in an earlier time, but which lay like fetters on developing trade and industry. The city of Florence, for instance, showed a liberality in its policy regarding land tenure, industry, domestic and foreign commerce, which was strikingly modern. The result was an extraordinarily rapid development in commerce, manufacture and finance, but also, unfortunately, a jealous rivalry between the cities, which expressed itself not only in commercial competition but also in destructive wars.

111. Genoa. — Genoa, situated in a position corresponding to that of Venice on the other side of the Italian peninsula, grew great like her in the course of the crusades. In conflict with Pisa, which had become a threatening commercial rival, Genoa was a complete victor by the naval victory of Maloria in 1284. Against Venice the city was not so fortunate. Genoa recovered in part from the blow dealt her by Venice in the fourth crusade, when the Greek empire was re-established at Constantinope (1261), and won some important naval victories in the constant succession of wars culminating in the battle of Chioggia in 1380. The Genoese managed always to secure a share of the Oriental trade; they helped to establish the system of joint stock companies; and contributed to the development of banking and public finance. They lacked, however, the advantages of the Venetian situation, both as regarded their opportunity for trade and their capacity for defence. They were drawn into the net of continental politics, and as at home they had never shown the ability of the Venetians to pacify or to crush rival factions, their force was wasted in useless political conflicts.

112. Inland cities; Florence. — Besides the two great seaports of Venice and Genoa other cities of northern Italy grew rich by industry and commerce at this period, notably Milan. The chief commercial city in the interior, however, was Florence in central Italy. Though Florence had no seaport of its own until after 1400, when it overpowered Pisa and Leghorn, it carried on an extensive commerce in its chief product, wool and silk textiles. Great trading houses bought up the raw material through agents settled in markets like Bruges, or traveling for years at a time, and sold the finished product through a similar network of agencies. The amount of manufacturing and commerce in the city stimulated the development of banking institutions, and Florentine bankers gained not only a regal position at home, but also a commanding voice in international politics.

113. Other Mediterranean cities; Marseilles, Barcelona. — On the Mediterranean coast of France the only great port at this period was Marseilles, which had developed rapidly in the course of the crusades. It exported to Italy and the East French textiles (woolen and linen), wood, metals, wine, oil, soap, etc.

In Spain the Arabs had developed the arts of civilization to a point which was far above that of the contemporary Christian states. Toward the close of the Middle Ages, however, the contest between them and the Christian kings for the supremacy of the peninsula absorbed the best energies of both parties, and caused an actual decline in material civilization. One city, however, Barcelona, carried on a very extensive commerce, and was one of the most important ports of the Mediterranean. Its inhabitants enjoyed unusual freedom under the kings of Aragon and were reputed to be among the best sailors of their time; they had trading stations along the coast of the Mediterranean as far as Egypt and Syria, and as merchants or pirates frequented the Grecian archipelago.

QUESTIONS AND TOPICS

1. Study: (*a*) the position of Venice in the Mediterranean; (*b*) the peculiarities of the site of the city; and write a report on the influence of these factors on the history of Venice in its different periods. [Encyclopedia.]

2. Compare the policy pursued by Venice toward Amalfi in Constantinople to the early policy of the Standard Oil Company. [See the account of railroad rebates in accounts of the Standard Oil Company by Lloyd or Tarbell.]

3. Compare the Venetian and the Athenian sea-empires in respect to (*a*) extent, (*b*) duration, (*c*) policy. [See chapter 2, and for further information on Venetian history see Brown.]

4. Make a map showing Venetian trade relations in the fifteenth century. [Falkner, Statistical Documents, V.]

5. Summarize the account of commercial transactions at that period. [Same.]

6. Write a report on the contributions of the Italians to book-keeping. [Cf. Beckmann, Hist. of inventions, Bohn's Library, vol. 1, pp. 1–5.]

7. Write a similar report on their contributions to banking. [Encyc., Palgrave's Dict., or some history of banking.]

8. Write out the English equivalents of the Italian words in sect. 103.

9. What resemblance can you find between Venetian policy toward Germans, and Boer policy toward English in the South African Republic? [See one of the many accounts of conditions preceding the war in South Africa.]

10. From the description in sect. 109 draw on an outline map the route of the Flanders galleys.

11. Write a report on the political conditions in Italy in the last centuries of the Middle Ages. [Current manuals of European history; Burckhardt, Civilisation of the Renaissance, London, 1878.]

12. Write a report on the rivalry of Venice and Genoa. [Brown, Venice.]

13. Write a report on the chief periods in the history of Genoa. [Encyclopedia.]

14. Study the history of the Medici family as showing the character of commercial and political life in Florence. [Encyclopedia; various biographies.]

15. Write a brief report on the commercial history of Marseilles or of Barcelona. [Encyclopedia.]

BIBLIOGRAPHY

A bibliography of the history of Venice is given by Brown, pp. xix–xxiii. A good brief survey of Venetian history, with a description of the modern city and a map, will be found in the Encyc. Brit. The history in the Story of the Nations series cannot be recommended. The best book for our purposes is Horatio F. Brown, * Venice, N. Y., Putnam, 1893. The history of other Italian cities is treated, with some attention to commerce, in Bella Duffy, The Tuscan republics with Genoa, N. Y., Putnam, 1893.

CHAPTER XII

COMMERCE OF NORTHERN EUROPE

114. Development of commerce in South and North. — Medieval commerce reached its highest development on opposite sides of the continent of Europe, in the Levant trade of the South and in the trade carried on by the Hanseatic cities of the North. Commerce was, of course, not confined to these localities. We have seen already how German merchants and the Flanders galleys united the North and South of Europe; and every one of the present European countries took a greater or less share in the exchange of wares. We have already described, however, the general character of commerce in the medieval period, and must refer the reader to that description for some idea of the commerce of countries which are not treated in detail in this sketch.

115. Conditions and wares of the Baltic trade. — The wares of the northern trade present a contrast to those which furnished the material of eastern commerce. In the first place the countries of central Europe found in Scandinavia and the Northeast, which formed the trading ground, peoples who were their industrial inferiors; these peoples were glad to receive manufactures instead of supplying them. Secondly, the cost of carriage was much less in the North than in the South, not only because transportation was almost entirely by sea and over a shorter route, but also because the tolls on trade were much less than in the Asiatic countries. It was possible, therefore, to trade in bulky articles of comparatively small value.

The luxuries which formed so large a part of the eastern exports were scarcely represented in the northern trade.

Amber can be put in this class, though the trade in it was of no great importance; this was a fossilized resin which was found on the coast of the Baltic, and which was used for ornaments. Wax was a far more considerable item of export, which may, perhaps, be regarded as a luxury, since it found its chief employment in the form of candles used in church services.

116. Exports from the Baltic, mainly raw materials. — Most of the exports from northeastern Europe were raw materials serving the simpler needs of man. Among the foodstuffs fish took the first place. Until the fifteenth century the herring, which does not now range outside the waters of the North Sea and the open ocean, came each year in late summer to the Swedish and German coasts of the Baltic; and the trade in dried and salted fish, especially herring, was one of the chief branches of northern commerce. The whole population of western Europe was at this time Roman Catholic, and the consumption of fish was of course stimulated by the rules of the church. Other foodstuffs exported were honey, butter, and salt meat.

The Northeast had no textiles to offer to the rest of Europe, but in its furs it had a substitute for them which was most highly prized. The furs included not only the finer varieties, the use of which was restricted to the upper classes, but also common grades that were desired as much for their warmth as for their appearance. Houses were so poorly heated that comfort was impossible without thick clothing. We can understand, therefore, the complaint of a German bishop who said that "we strive as hard to come into the possession of a marten skin as if it were everlasting salvation."

Other raw materials exported were skins and tallow from animal industry, and forestry products which were destined to be the mainstay of the Baltic trade in later times, various forms of timber and the group of products known later as "naval stores," including pitch, tar, and turpentine.

117. Exports from the West to the Baltic countries. — In return for its imports western Europe sent to Russia and Scandinavia its manufactures and the raw products which could not be obtained in the Northeast. The list includes wheat, wine, salt, and metals, and, among the manufactures, especially cloth and beer. The merchants of the West conducted the trade not only between their home districts and the less developed countries, but also between these countries; they carried herrings, for instance, from Scandinavia to Russia.

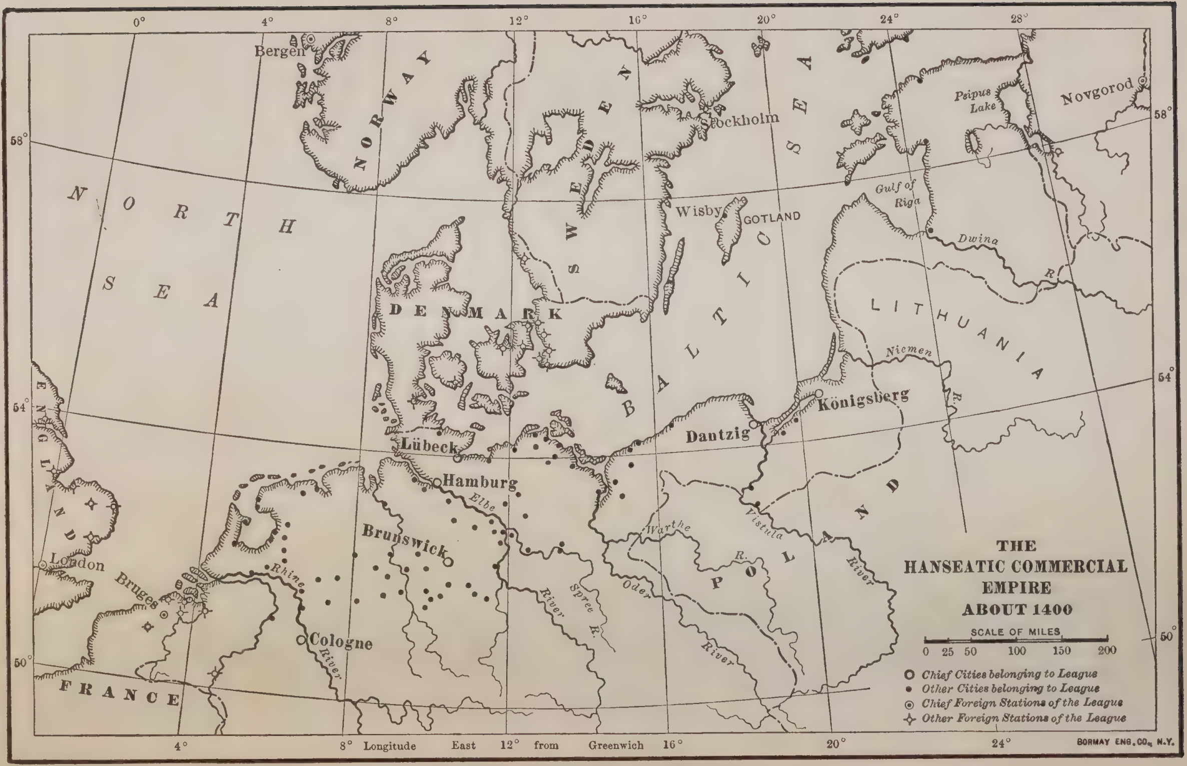
118. Contrast of the history of the commercial cities in Italy and in Germany. — The cities of Germany, which took advantage of the opportunities for trade in the North, were like those of Italy in their freedom from royal authority. There seems, therefore, a chance that they might fight among themselves for the trade, and that one of them might get a commanding position as did Venice in the South. No one of them, however, had the peculiar advantages of the geographical position and the freedom from attacks by land which Venice enjoyed. They were too evenly matched to settle quickly the question of supremacy, and they ran such dangers from the attacks of feudal lords that they could not afford to quarrel among themselves. Instead of competing they united, in the Hansa or Hanseatic League, which was the most remarkable commercial association of the medieval period.

119. Rise of the Hanseatic League. — The word "hanse" meant in early German a society, a band of men, and was applied to a number of commercial associations besides the particular league to which we apply it here. This league grew up gradually in the thirteenth and fourteenth centuries. The merchants of various German cities found it necessary to unite for the protection of their interests abroad, and the beginnings of the association are found in the island of Gotland, in the Baltic and in the city of London, where Germans carried on a considerable trade. After a while the cities at home took up the association which their merchants had started in foreign countries, and in the fourteenth century a great league grew up, centering in the cities at the southwestern corner of the

Baltic, of which Lübeck was the chief. Sailors were still afraid to navigate the waters around Denmark, because of the dangerous currents and shoals, so Baltic wares were carried across the isthmus, and cities like Lübeck grew great on this trade and on that which came down the Elbe valley.

120. Extent and organization of the League. — "When the ambassadors of the Hanseatic League in England in 1376 were asked for a list of the members who made up their vast association, they answered scornfully that surely even they themselves could not be supposed to remember the countless names of towns, big and little in all kingdoms, in whose name they spoke." The league was in fact very extensive, for it included not only the chief German seaports, but also towns in the interior and some towns outside of Germany altogether. The number varied from time to time; in the period of greatest power it was nearly 100, stretching from Dinant in modern Belgium to Krakau and Reval in the East, and including towns as far inland as Göttingen in Germany. The towns never formed a very close union, but sent their representatives every year or so to a meeting-place where they could discuss matters of common interest, decide upon the policy to be followed, and raise what resources they could for carrying the policy through.

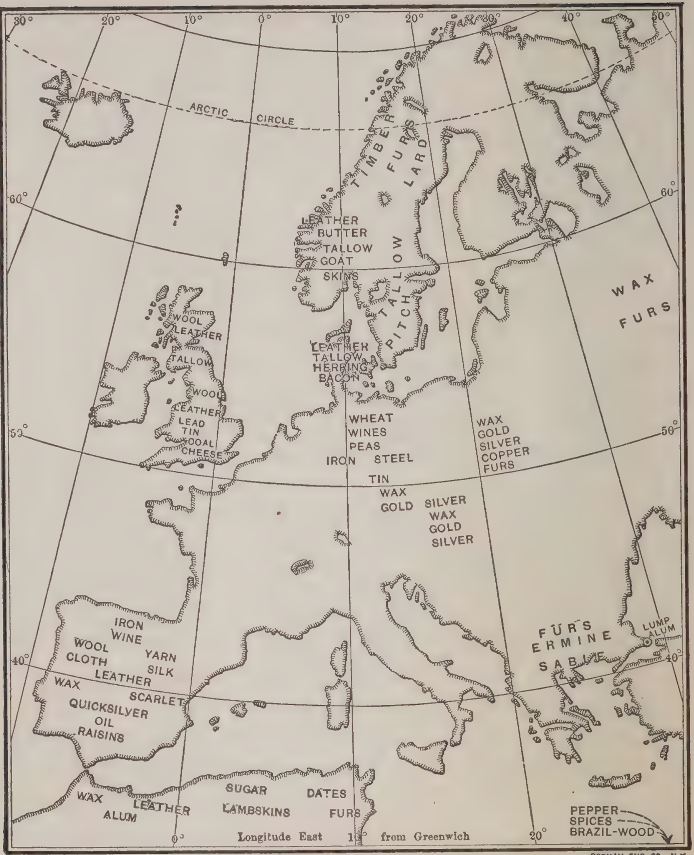
121. Control of the commerce of northern Europe by the League. — The aim in general was the protection of commerce from the attacks of pirates and feudal lords and the negotiation of commercial treaties which would extend the privileges of members and preserve their monopoly of trade. The League was so successful that it obtained in the closing centuries of the Middle Ages a predominance in the commerce of northern Europe comparable to that of the Dutch and of the English in later times. In the West it had to share its trade with other peoples. In this direction Bruges was the terminus of many of the voyages; at that port the Hanseatics met the Venetians, coming in the Flanders galleys, and secured also many wares from western Europe. This was by no means,


THE
HANSEATIC COMMERCIAL
EMPIRE
ABOUT 1400
SCALE OF MILES
0 25 50 100 150 200
○ Chief Cities belonging to League
● Other Cities belonging to League
◎ Chief Foreign Stations of the League
✧ Other Foreign Stations of the League
NORTH SEA
NORWAY
SWEDEN
DENMARK
BALTIC SEA
LITHUANIA
POLAND
ENGLAND
FRANCE
GOTLAND
Bergen
Stockholm
Wisby
Novgorod
Peipus Lake
Gulf of Riga
Dwina R.
Niemen R.
Königsberg
Dantzig
Lübeck
Hamburg
Elbe
Brunswick
Cologne
Rhine River
London
Bruges
Vistula River
Warthe R.
Oder River
Spree R.
River
0°
4°
8°
12°
16°
20°
24°
28°
58°
54°
50°
Longitude East from Greenwich
BORMAY ENG. CO., N.Y.

however, the limit of their western voyages. They had an important trading station in England, with a great group of buildings, the "Steelyard" near London bridge, and invested their capital in English tin mines; one of their favorite voyages was to Bourgneuf, south of the Loire, on the western coast of France; and they sent their ships in some periods as far as Spain and Portugal.

The North and East of Europe were, however, the field of their greatest success. In Scandinavia (including Iceland) and Russia, they gained a complete monopoly of commerce; the peoples of those countries were so backward that they permitted the Germans to do the most important part of their trading for them, and the governments were weak and were easily forced to grant the privileges desired.

122. Methods of trading; factories. — The methods which the Hanseatics employed in their trade are worthy of special attention, because they were characteristic of the time, being very similar to those of the Venetians in the East, and because they have been employed under similar conditions in later periods. They established "factories" in the sense of trading posts (*not* manufactories), where most of the trade was carried on. A factory was, in the first place, a fortress where the merchants could be safe from attacks by the natives; at Novgorod, for instance, the group of buildings was enclosed and was carefully guarded by men and by great watch-dogs both day and night. The factory was, moreover, a place where the trade could be regulated, and where the merchants could be kept under supervision. To let a man trade as he pleased would have subjected not only himself but all his compatriots to danger, for the natives made little distinction between foreigners and would readily have punished one merchant for the fault of another. The factories were centers of social life, with their rough initiations and their games, and they were useful in training young men in commerce; but they were kept under such strict discipline and minute regulation that they seem like garrisons in the enemy's country.



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The map follows a contemporary description of the wares which were brought for sale to Bruges and Flanders, omitting some of the less important and those difficult to identify. Of the countries left blank on the map, Italy excelled in manufactures (textiles and glass), and France had a notable export trade in wine.

123. Flanders and Bruges. — Between the regions under the commercial control of the Hanseatics on one side and the Venetians on the other lay a sort of neutral zone where both parties met, centering in the region about modern Belgium. This district was favored not only by the junction in it of the northern and southern trade; it had other advantages of position in that it lay near the mouths of great rivers, the Scheldt, Meuse, and Rhine, and was also at the crossing of important land routes. It had enjoyed an early development of industry in its towns, and had been liberally treated by its feudal rulers.

At different periods the great commerce which flowed to and through this district chose different points for its concentration. In the fourteenth century the favored spot was Bruges (the Flemish word meaning bridges), the greatest market in northern Europe, vying even with Venice. Here could be found Scandinavians, Germans, English, French, Portuguese, Spaniards, and Italians, exchanging the wares from different sources; a contemporary writer names 30 different countries, both Christian and Mohammedan, which fed the market of Bruges with their commodities. The natives were content to let foreigners carry on the business of transportation; they stayed at home and grew rich from the wares, money and credit instruments which commerce brought to their doors.

124. Decline of Bruges in the fifteenth century; rise of Antwerp. — Partly because of this passive part which they assumed, partly because of the practice of medieval countries in diverting their trade from one place to another, the people of Bruges had but a precarious hold on their commerce, and lost it in the fifteenth century. The silting up of its harbors, making these unfit to hold the larger ships now coming into use, explains in part the decline of Bruges, but political forces were at work also to divert commerce to another center. In the fifteenth century the place of Bruges as the great market of northern Europe was taken by Antwerp, which had fought its way up against all rivals, and which held the leadership now for one hundred years.

125. Conditions of commerce in England. — England lay on the outside of the great currents of medieval commerce. It had an advantage which it had enjoyed since pre-Roman times, the practical monopoly of tin production in Europe;

and added to this in the latter part of the Middle Ages a still more important monopoly, that of wool production. Sheep were raised, of course, in other parts of Europe, and the merinos of Spain yielded a finer grade of wool than could be produced in England. For some reason, however, the sheep industry did not prosper elsewhere as it did in England. Possibly the constant wars and raids which disturbed the feudal states of the continent may have prevented the production of a commodity which could be so easily destroyed or carried off as booty. At any rate, the more settled political conditions in England, where internal war became soon a rare exception, favored the development of all the national resources. Aided by the prevalence of peace at home, and by the disappearance of feudal tolls on trade, the English advanced rapidly in the fourteenth and fifteenth centuries and instead of exporting the raw wool began to make it into cloth and to export the finished product. Trade was furthered also by the continental conquests of English kings, which brought England and the South of France into close relationship, and built up a large import trade in French wines.

126. English trade passive until the close of the Middle Ages. — Most of the trade in English wares, however, was in the hands of foreigners until the very close of the Middle Ages. The English kings showed more interest in the development of their resources by the encouragement of alien merchants than they showed in the extension of commerce carried on by natives. Hanseatics and Venetians fetched and carried the wares of distant countries for the English; and the "Merchants of the Staple," a society composed largely of aliens, enjoyed a legal monopoly of the export of the most important raw materials which England supplied to European commerce — wool and sheepskins, leather, tin, and lead.

English merchants became restive in the inferior position assigned to them both at home and abroad, and before the end of the Middle Ages began to fight for equal rights or for privileges, but they did not secure final and complete victory until the beginning of the modern period, in the sixteenth century.

QUESTIONS AND TOPICS

1. Pursue on sects. 114–117 studies similar to those suggested above (sects. 88–94) for the Levant wares. For the character of the Baltic trade at present consult the Statesman's Year-Book, index, Norway or Sweden, The history of the trade in amber may be made an interesting study, as the article has been an object of commerce since prehistoric times.

2. Origin of the Hanseatic League. [Zimmern, pp. 11–29.]

3. What place does Lübeck hold in the commerce of modern Germany? [Statesman's Year-Book, Germany, last table in section on commerce.]

4. What effect may the Elbe-Trave Canal, opened June 16, 1900, have upon the future of the city? [See U. S. Consular reports and newspapers about that date.]

5. Contrast the organization of the Hanseatic League and of the Venetian empire.

6. Report in detail on the organization of the League, and its weaknesses. [Zimmern, 202–220.]

7. Write an essay on the life in a Hanseatic factory. [Zimmern, 137–147, Bergen; 179–201, London.]

8. Compare the Hanseatic factory with an Indian trading post. [Descriptions of such posts can be found in histories of the Hudson's Bay Company.]

9. Write a report on the rise and fall of Bruges or of Antwerp as a commercial center. [Encyclopedia.]

10. Write a report on one of the following topics in English medieval commerce:

(*a*) Exports.
(*b*) Imports.
(*c*) Shipping.
(*d*) Attitude of the king.
(*e*) Institution of the Staple.

[Sufficient material on all these points may be found in Cunningham, Growth, and if the student is able to use a book like that he will get far more benefit than in abstracting the summaries (often inaccurate or misleading) in the smaller manuals.]

BIBLIOGRAPHY

For general bibliography consult Gross, Sources, and Palgrave's Dictionary.

General accounts will be found in Encyc. Brit., article Hanseatic League, and in Zimmern, ** Hansa Towns, a book which can be strongly recommended. It includes a map and illustrations, but has no bibliography.

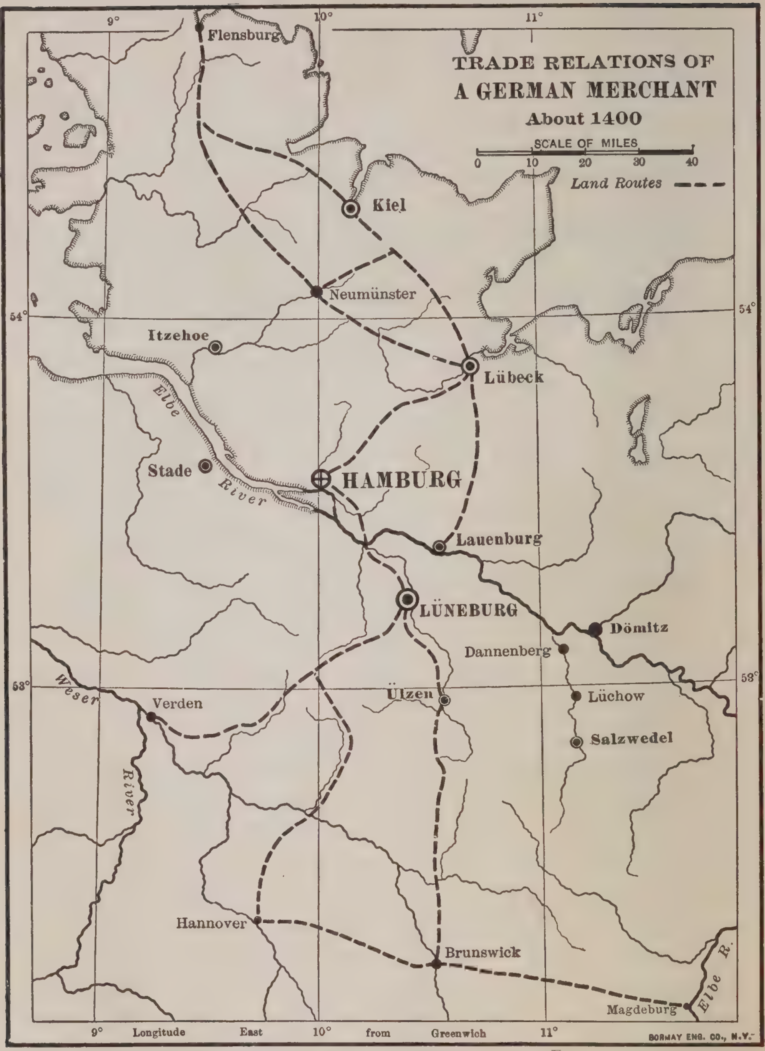
For descriptions of English commerce in this period see Cunningham, ** Growth, or the articles in Traill's Social England. Briefer accounts are, of course, to be sought in manuals already mentioned.

CHAPTER XIII

DEVELOPMENT OF THE MEDIEVAL ORGANIZATION OF COMMERCE

127. Types of medieval traders; pedler, shopkeeper. — Enough has already been said to guard the reader against the idea that great wholesale merchants of the modern type were common in the Middle Ages. The regular type of trader was the artisan who manufactured the goods he sold, or the pedler who collected a stock of goods in a town and carried them about in a pack for sale. The pedler's stock was not unlike that which he would carry around the country nowadays, — sewing materials, toilet articles, etc. An illumination in a manuscript of the fourteenth century, representing monkeys opening a pedler's box, shows vests, caps, gloves, musical instruments, purses, girdles, hats, cutlasses, pewter pots, and other articles. An English statute of the fourteenth century, describing a similar stock in trade, mentions rabbit skins as one of the articles which the pedlers took in exchange for their wares, and an English author of the period accuses them of catching cats for their skins. The petty shopkeeper stood a step above the pedler. He had a regular shop in a town, where he displayed his wares, and often went on trips to the markets of other towns, where he set up a booth and carried on such trade as the town regulations allowed.

128. Merchants. — Still another step above the shopkeeper was the real merchant, who had his warehouse, from which he supplied the retail traders, and who bought up considerable quantities of goods at the great fairs at home and abroad. It is doubtful whether we can find in this class in northern Europe any men who devoted themselves entirely



See section 128 for a description of the trade of this merchant. The map shows only his German business, and indicates roughly, by the size of the circle, the importance of each town in his commercial dealings. Note how trade tended to the water routes.

to wholesale trade; and merchants had not yet specialized so that each would devote himself exclusively to the trade in a particular ware. We can illustrate the point by a German merchant, whose account books have been preserved so that it is possible to follow his business operations exactly. Vicko von Geldersen was a draper of Hamburg, where he rose to wealth and a high position. He imported cloth wholesale, and sold it both wholesale and retail. But he made use of his connection with Bruges, which was the great cloth market, to send there for sale iron, honey, meat, butter, etc., and to import such wares as oil, spices, figs, and almonds, which he sold to smaller dealers in many cities of Germany.

Members of the class to which Vicko belonged were the leaders of commerce in the North of Europe during the Middle Ages; they accumulated wealth which seemed great at the time, and formed an aristocratic class in social and political life. Their sons were brought up to follow the family business, and often trained to it by extensive study and residence in foreign countries.

129. Development of commercial association in the Middle Ages. — In the Middle Ages we find the beginnings of that process of association which can be traced step by step to the formation of the great "trusts" of the present day, and which forms one of the most important features in the development of commerce. To point out the various advantages which arise from the association of laborers and of capitalists would lead us into political economy; and to describe in detail the development of the various forms of association would require an excursion into legal history equally out of place. We must content ourselves with indicating some of the main features which are easily intelligible.

The need of association was felt especially in the Middle Ages because it was necessary that a merchant or his representative should accompany his wares on the road. It was often difficult for a merchant to look after a commercial venture in person; he could not trust it to a hireling; and the slight development of the carrying and commission profession made it impossible for him to leave it to a class of persons who nowadays make it their business to attend to such matters. The merchant, therefore, would associate with him some one who could represent his interests; and a modern author asserts that in comparison with the amount of business many more commercial companies were formed then than at present. The merchant would choose by preference a member of his family, and family partnerships were the prevailing form of association at first. With the growth of commerce, however, greater freedom of association was demanded, and the group ceased to be limited by considerations of relationship.

130. Advantages of association. — By joining together, two or more men could follow different lines; one would stay at home while another could accompany the wares, and perhaps still another could attend to sales in a distant city. The advantages of this are apparent, and of not less importance are the benefits arising from the better utilization of capital. A person who had accumulated wealth, but who on account of advanced age, physical disability, or other circumstance could not himself employ it in commerce, would join with him a man who contributed to the enterprise the necessary business activity.

Capitalists gained also in another way, for they were enabled by association to share the risks of an enterprise. A man who put all his money into one ship or cargo ran the risk of being ruined; and foregoing paragraphs have shown that the dangers in the path of commerce were by no means slight. By distributing his capital in a number of enterprises, however, as could easily be done if he entered into association with others, he could hope to make up for any probable loss by the profits of his successful ventures, and can be regarded as insuring himself. We find, in fact, that the shipping business was for the most part carried on in this way.

131. Forms of association; partnership. — Commercial association took ordinarily the form of a "commenda" (Latin *commendare*, entrust). The "commendator" contributed capital in the form of money, wares or a ship, while the other party, called the "tractator" contributed only his personal services to the enterprise; of the profits one fourth went to the tractator and the remainder to the commendator. The tractator who saved his earnings could in time also contribute capital, and was given a greater share of the profits and more freedom in conducting the business.

The commenda, corresponding to a "silent partnership," was older and of more importance in commercial undertakings than the ordinary partnership of the present day; but the latter form of association grew up also at this time, and was used in commerce as well as in industry. The joint-stock corporation belongs in its important applications to a later period.

132. Spread of the practice of association from Italy. — The different forms of partnership developed especially in Italy in the last few centuries of the Middle Ages, when the growth of commerce was most rapid, and they became extraordinarily extensive and important. They secured the union of capital and executive ability which enabled far greater enterprises to be carried on than would have been possible without them. The Italian commercial house of the Peruzzi, for instance, had fourteen branches and one hundred and fifty factors or agents. Even the assistants in the business, who did not themselves contribute capital to it, were interested in its success by a system of profit sharing. From Italy the practice of association spread to the North of Europe, and it became practically universal in commercial undertakings. Each of the larger firms had its characteristic trade-mark, distinguishing its bales of goods.

133. Position of the Jews in medieval commerce. — The Jews held a peculiar position in medieval Europe. They were distrusted and disliked by the Christians, because of their difference in religion, and because of their business ability, which made competition with them a difficult matter. Though they were scattered throughout Europe they kept touch with each other, and so enjoyed exceptional advantages in the pursuit of commerce and the extension of business relations. In the early part of the Middle Ages they were indispensable; Christians were not educated up to their level in business, and had to leave to them the major part of the slight commerce of the times. As Christian peoples developed, however, they demanded for themselves the place which the Jews had won; and by a long series of restrictions and persecutions they forced the Jews into some particular branches of business where the Christians could not follow them. The church taught for a time that it was wrong to lend money at interest, and discouraged Christians from seeking gain by this means. The Jews, therefore, seized the opportunity which was denied to Christians, and became money-lenders. Their position was always precarious, for the law gave them no protection, and they were subject constantly to robbery by feudal princes and by the people, who believed everything evil of them. From England they were banished altogether, for several centuries. They showed astonishing skill and fortitude, but in the last centuries of the Middle Ages they lost their position even as leaders in credit operations. The church then permitted money-lending if the terms were not extortionate; and Christians from southern Europe, "Caursines" (named from Cahors, in the south of France) and "Lombards," succeeded the Jews as the money-lenders of Europe.

134. Character of currency in the Middle Ages. — One of the serious obstacles to the development of commerce was the character of the currency in the various countries of Europe. Assuming that the reader appreciates the importance of money as facilitating the operations of exchange, and knows the qualities of good money, we may confine ourselves to pointing out some of the characteristic faults of medieval currency.

(1) Merchants could not rely upon the government to maintain the standard of value. In many countries the kings debased the coinage again and again, to secure the means of

carrying on war or paying public expenses of other kinds. Every debasement, as it left the coins with less pure metal, lowered their purchasing power and raised prices; many innocent people suffered and everybody grew reluctant to make bargains and contracts.

(2) In many countries, especially those on the Continent, the privileges of the great feudal lords included the right to keep a mint and to issue coins. The central government restricted this right, as it grew stronger, but in general the currency of medieval Europe was made up of a vast variety of coins of standards even less reliable than that of the king's coinage. There was danger that a coin, even if it was of good weight, could not be passed at its full value outside the locality where it was minted.

(3) Even in countries like England, where feudal coinage was put down and where debasement by the government was exceptional, counterfeits were not rare, and the clipping of coin was very common.

These characteristics of medieval currency made the money-changer a necessary figure in the commercial world; he was to be found everywhere, even in the small towns, buying and selling the various coins in circulation.

135. Difficulty in making payments in distant places. — While the money-changer facilitated payments in any given place, he was not of much assistance to a merchant desirous of making a payment in a distant town or country. The merchant, it is true, could buy from him foreign money with which to make the payment; but the transportation of the actual coin was not only dangerous and expensive, but also subject to legal restriction, and was to be avoided if possible. The merchant would probably prefer to send instead of money some ware, which he could sell to advantage at the destination, and then with the proceeds make his payment. For example, when Michael Behaim of the Nuremberg Company wanted to send 1,000 gulden from Breslau to Nuremberg, he found it expedient to buy an amount of wax which he could sell in

Nuremberg for the required sum, and he shipped that instead of money.

136. Introduction of the bill of exchange. — It might not, however, always be convenient for a man to meet his obligations in this way; he might not have the commercial knowledge, or perhaps he might have no good opportunity to ship a ware. Behaim, in the case cited, had in fact resorted to the wax shipment only from necessity, after he found it impossible to make his payment by the means of remittance now become general, the *bill of exchange.*

Suppose that B. in Breslau owed the 1,000 gulden, to A. in Nuremberg, for spice; and suppose that D. in Breslau was the creditor of another Nuremberg merchant C, to the extent of 1,000 gulden, perhaps for furs. It would be absurd for B to ship the money or to go out of his way to ship wax to A, and for C to ship the same value to D, when the payments could be made to cancel each other. Why should not B pay to D in Breslau the 1,000 guldens due him, and tell C to pay the same amount to A in Nuremberg? This could be accomplished by means of bills of exchange; D could write out an order to C directing him to pay the money, and sell it to B, who would thus have the means of paying his debt in Nuremberg to A.

Such an operation implies, however, not only regular commerce of considerable volume but also mutual confidence among the participants. How could B know whether D actually had a correspondent in a distant place who would meet his obligations promptly? It was not, in fact, until the thirteenth century that bills of exchange were used to any considerable extent; then they were developed in Italy, and spread from there.

137. Development of banking in Italy. — In Italy, also, the money-changers developed other forms of banking. As they were dealers in money, business men in want of capital for their operations naturally sought it of them. The money-changers might lend it from their own stock or act as brokers and secure the money from some man who had a surplus. The short step from this to the common form of modern banking was made when merchants deposited their surplus cash with the money-changer, and he had thus a considerable stock, which he could lend so long as he kept sufficient reserve to meet the demands of depositors. It soon became unnecessary for money to pass at all in large transactions; a man could get a loan from a bank simply by having a deposit ascribed to him on the books, and could assign this loan to others as he chose to pay it out. The characteristic danger of banking, the attempt to make a great deal of credit out of a little capital, appears early in Italy, with its results of failures and crises. The advantages of the banking system, however, the economizing of time and money and the facilitating of business operations, were so clear that banking kept its place, and spread toward the close of the Middle Ages from Italy to other countries.

QUESTIONS AND TOPICS

There is, in the history of commerce, no topic more difficult and none more important than the development of the organization. The student who has learned the facts has made only a beginning; he must grasp the significance of the facts if he is to gain anything from his study. The teacher is advised, therefore, to enlarge on the advantages of association and cooperation, as they are treated, from one point of view, in Adam Smith's celebrated discussion of the division of labor, and in many manuals of economics.

So much depends on the degree of advancement of the pupil, and on his particular environment in country, town or city, that it is difficult to suggest specific questions or topics. In general, the teacher should suggest the meaning of earlier development by constant reference to the present organization. Why have pedlers disappeared in so many districts, where do they still remain, and why? What is the proportion of retail and wholesale merchants in your city; how far has the specialization of wholesale trade progressed? Answers may perhaps be found in a business directory. The student who is competent to work out the history of business organization in his own town will not fail to get new light on the history of earlier development; and a report on the history of some particular branch of trade at home should be an excellent exercise to be worked out. Another exercise would be the history of the different forms of association (partnerships, joint-stock companies), and a study of the reasons lying behind the rise and fall of a particular form. The choice of questions and topics here must be left to the ingenuity and discretion of the teacher.

The history of the currency in England [see Cunningham] is an easier topic.

On the rise of credit instruments (bills of exchange, banking), the student will probably be best prepared if he is given reading, either in review or in anticipation, in some general manual which will enable him to appreciate the importance of credit institutions now, and will hence interest him in their origin. [Cf. Usher, The origin of the bill of exchange, Journal of Pol. Econ., Chicago, June, 1914, 22: 566–576.]

An exercise which should be profitable and rather easy is a report by the student on the life of some English merchant. [See Fox Bourne, or consult the Dictionary of National Biography on names like Richard Whittington, William Canynges, William de la Pole, etc. Further biographical material is provided by Alice Law, Some notable "King's Merchants," Economic Review, 1902, 12: 309 ff.; 1903, 13: 411 ff.]

If Bourne's Romance of trade is available the student may prepare an abstract of chap. 1 (the Jews) or chap. 4 (money and credit).

BIBLIOGRAPHY

The student will find bibliographies of some of the topics treated in this chapter by consulting the appropriate articles in Palgrave's Dictionary. Most of the best literature is foreign. The best references in English are to ** Ashley and * Cunningham.

The important and difficult subject of the development of capitalistic organization is treated by John A. Hobson, * Evolution of modern capitalism, new ed., 1916, chap. 1, W. Sombart, ** The quintessence of capitalism: a study of the history and psychology of the modern business man, London, 1915, and by Pirenne, * The stages in the social history of capitalism, American Hist. Rev., Apr. 1914, 19: 494–515. One aspect of the subject is covered by Arthur H. Woolf, Short history of accountants and accountancy, London, 1912.

CHAPTER XIV

COMMERCE AND POLITICS IN THE LATER MIDDLE AGES

138. Development of the modern political system in the later Middle Ages. — Toward the close of the Middle Ages the feudal system of government gave place gradually to a system more like that which the Romans had established and with which we are familiar now. As trade and intercommunication increased, and towns grew up holding a population of considerable wealth, the kings found it possible to make into a reality the position of nominal headship which tradition and the church conferred upon them. They found in the mercantile and manufacturing classes people who could afford to pay taxes, and who were willing to pay large sums to be relieved from the oppressions of the feudal lords. It became possible once more to transport supplies and to send troops to distant localities, and the kings devised means by which they could keep in touch with their officials, and hold them to loyal service. The result was a great increase in the power of the central government, at the expense of the feudal lords.

139. Variety of development in different countries. — The development, as sketched above, was very different in the different countries. It came early in England, and local lords lost practically all of their independence. In France it was a very gradual process, extending over the last four centuries of the Middle Ages. Even in the sixteenth century and later, the kings, though they seemed to enjoy great power, did not abolish all the remnants of feudalism, which continued down to the French Revolution in 1789, to the great harm of industrial development. In Spain the union of the crowns of Castile and Aragon just before 1500 completed the process, by establishing nearly absolute royal authority over the greater part of the peninsula. In Germany and Italy the result was different. The same man, who called himself the Emperor of the Romans, claimed the royal power in both countries, but in attempting too much he lost everything. He wasted the royal resources in vain attempt to establish his authority, and became a mere figure-head. The control of government passed in those countries to local authorities; but it is important to note that these included not only feudal lords, but also cities which had become strong enough to throw off feudal authority and to establish for themselves almost complete independence.

140. Effect on commerce of a strong and of a weak central government. — In a country in which the cities established complete independence they seemed for a time to have gained by throwing off the royal power. Each city could control its affairs and shape its policy to suit local interests; and the great cities of Italy and Germany before the close of the Middle Ages were the most advanced and prosperous parts of Europe. Though they controlled only small areas of land they had great resources from their commerce, and even in war could hold their own with the feudal lords fighting in the old-fashioned way.

They were strong enough to fight a feudal lord; they were not, however, strong enough to fight a modern king. While they were building up their power at the expense of rival cities and at the expense of the country districts, the kings of lands to the west of them were quietly engaged in uniting all the cities and the country districts, too, under one rule. The cities in France and England seemed for a time to lose, because they were forced by the kings to make concessions to each other and to the country districts. When, however, they had become used to consider themselves as only parts of a bigger whole, the nation, they found that their sovereign was far better fitted to represent their interests and further their progress than any one of them was individually. The struggle of the independent cities of Italy and Germany against the national states of England, Spain, and France was not decided until after the discovery of America and the sea-route to Asia, when the national organization proved decisively its superiority to the municipal.

141. Rise of a national commercial policy. — The rise in power of the central government in countries like England and France is proved by the appearance, toward the close of the Middle Ages, of a national commercial policy. The reader will remember that even in these countries the towns were at first so independent that each adopted a commercial policy of its own; as though, nowadays, for instance, Boston and New York and Philadelphia should each have its own independent tariff and set of commercial regulations. A merchant of Dover was a foreigner in Southampton, and if he wanted to collect a debt due him from a Southampton merchant he would appeal, not to the central government and the law of the land, but to the Dover government; and the Dover government would put pressure on the Southampton government, perhaps by arresting any merchant from Southampton and holding his goods, until the debt was paid. About 1300 the English king was at last strong enough to make general regulations in matters like this of the collection of debts, and about the same time he established a national tariff at the ports, as a regular system, and forced the various towns to give up the right to levy what dues they pleased. A similar change took place in France at nearly the same time; the idea grew strong that the general interest of all Frenchmen was superior to the particular interests of any town or individual, and the people of France began to look to the king instead of to the local authorities for protection and control.

142. Medieval ideas on commerce. — When commerce was undeveloped and only an incidental feature in the economic life of peoples, those high in authority in church and state held ideas of it which have faded away as commerce has proved its power and shown its benefits. Many kinds of commerce, including some forms of money-lending now considered legitimate, were prohibited because they seemed to give a man something for nothing. In ordinary trade one man was thought to make his profit at the expense of another, and government was always vigilant to protect the weaker party. A government, moreover, looked on foreign commerce rather as a privilege of its citizens than as their right, and used it freely as a political weapon instead of considering it an economic necessity. The ports of the kingdom were the "king's gates," which he could open or close at his pleasure, to further his royal policy.

143. Characteristic features of commercial policy. — Among the characteristic features of national economic policy in the later centuries of the Middle Ages we find the following:

(1) Export and import could be carried on only by favor of royal license, which was granted to and withdrawn from groups of natives and foreigners as suited the king's ideas.

(2) The export of necessaries was frequently prohibited (as had previously been the custom with the towns), to increase the supplies of the kingdom and keep an enemy from getting the good of them.

(3) The export of money, as a specially valuable asset of the kingdom, was prohibited and its importation was favored.

(4) The growth of native industries was stimulated by a variety of regulations. The English cloth manufacture was protected, for instance, in the following ways: the export of raw material (wool, teasles, etc.) was forbidden from time to time, that the home manufacturer might supply himself more cheaply; the import of foreign cloth was restricted; and the wearing of fur was limited to certain classes, that the home market for woolen manufacture might be larger. Among the protected industries was shipping. "Navigation acts," requiring the use of native ships, were common, though they ordinarily remained in force but a short time and had not yet hardened into a system.

(5) The foreign trade of a country was not only restricted, as at present, to certain points on the frontier where duties

could be collected, but was often concentrated in one or more special places, the "staples." The government could then oversee the trade more easily, could collect its dues, insure good quality, and protect merchants more readily, and it could also make better use of trade as a weapon of policy, directing the stream of goods where it pleased, and so rewarding or punishing other states.

QUESTIONS AND TOPICS

1. Review the sections on feudalism, and see how the modern system of government grew up from feudalism as the forces which had created feudalism were reversed. [Cf. Seebohm, Prot. Rev., pp. 15–21.]

2. Write a report on the rise or decline in power of the central government in one of the following countries, in the period 1100–1500: France, England, Germany, Italy, Spain. [Consult the current history manuals, or the encyclopedia.]

3. In connection with sect. 140 read the sections in a later part of the book, describing the advantages which have come to Germany and Italy in recent times by their union under strong central governments.

4. Write a report on medieval doctrines on one of the following subjects:

(*a*) Loans at interest.

(*b*) Profits in trade.

[Cunningham, Growth, or Ashley, vol. 1, chap. 3; vol. 2, chap. 6.]

5. Write a report on "protection" in the medieval state. [See Cunningham or Ashley on commercial policy, or read J. S. Nicholson, The English corn laws.]

6. What has been the history of the meaning of the word *staple?* [Dictionaries, especially Murray's New English Dict.; Cunningham.]

BIBLIOGRAPHY

The subject of this short chapter takes the reader within the bounds of political history, and he is referred to the many history manuals for further reading and references. The growth of the French monarchy has been well treated by Adams, Civilization, chap. xiii, or Growth of the French nation.

PART III. — MODERN COMMERCE

CHAPTER XV

EXPLORATION AND DISCOVERY

144. The revolution about 1500; topics to be considered. — The period centering about the year 1500 was marked by changes so rapid and so extensive that they deserve the name of revolution. The changes affected not only the intellectual life of Europe (the Renaissance) and its religious life (the Protestant Revolt or Reformation); they caused a revolution also in the world of politics and in the world of industry and commerce. It will be necessary to survey some of these changes before we return to the narrative of the history of commerce. Three main topics will occupy the attention: first, the extension of the commercial area by exploration and discovery; second, the development of the commercial organization by new forms of cooperation; third, the rise of modern states in Europe, and their influence on the growth of commerce.

145. Growth of geographical knowledge. Asia. — About the year 1000, to most people in Europe "the world" meant scarcely more than the village in which they lived, so limited were their interests and their knowledge. Pilgrims to the holy places in Palestine brought back with them knowledge of this edge of Asia, but what the Greeks and Romans knew of that continent and of Africa had been forgotten, and even the better educated people thought of the outer parts of the world as mysterious regions, wrapped in darkness or peopled with prodigies, when they thought of them at all. The growth of the Levant trade and the crusades caused an increase in interest and in information. After the year 1200, when a great Mongol or Tartar Empire was established in inner Asia by Genghis Khan, Europeans began to penetrate Asia seeking

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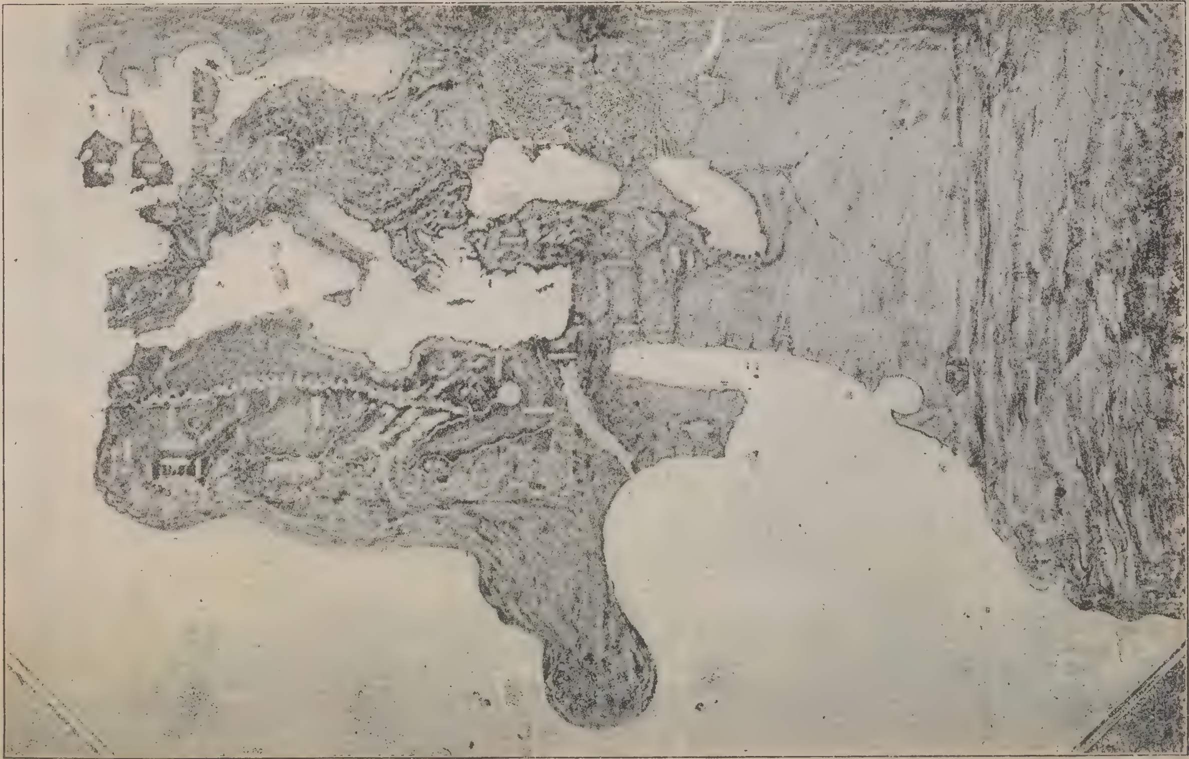


A MEDIEVAL MAP OF THE WORLD

(The Laurentian Portolano. 1251)

aid from the Mongols against their enemies the Turks. Ambassadors, missionaries, merchants, and explorers made the journey so frequently that a regular guide-book was written by an Italian soon after 1300; and about the same time the Venetian Marco Polo returned from a long stay in China and described his travels. He had gone by land, through Persia, Turkestan, and Mongolia, and, returning by sea, he could tell also about Japan, the great Malay islands, Burmah, India, etc. Before the invention of printing knowledge spread slowly, but the maps of the fifteenth and sixteenth centuries show that the results of these explorations were not lost, and Europe had become conscious that Asia was bounded by a sea on the east.

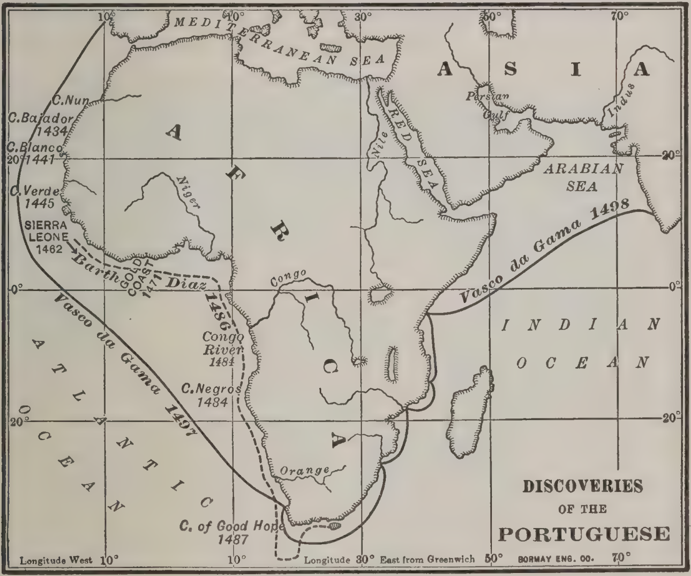
146. Need of a sea route to Asia; means of navigation. — The explorations by land in Asia were of great importance in spreading knowledge of the countries from which the wares of the Levant trade came, but they were of little assistance to traders who sought to develop commerce on the old routes. With the decline of the Mongol power and the spread of the Turks, passage across Asia became constantly more difficult. The available routes finally narrowed to one, that through Egypt, and trade on this route was burdened with very heavy tolls. The European people were urged by powerful economic motives to seek out the sea route to India which was now believed to exist.

The means of navigation were still those of the later Middle Ages. The ships in which some of the most adventurous voyages were taken were of fifty tons or even less. The rig had been improved slightly, so that the ships could be handled more readily than when they bore the old square sails; and instruments for ascertaining the position at sea were also improved. Still, when we add to the actual peril of distant voyages the imagined dangers which the minds of men ascribed to unknown seas, we must admit that the early explorers met a test of courage to which men nowadays are rarely put.

147. The lead in maritime exploration taken by Prince

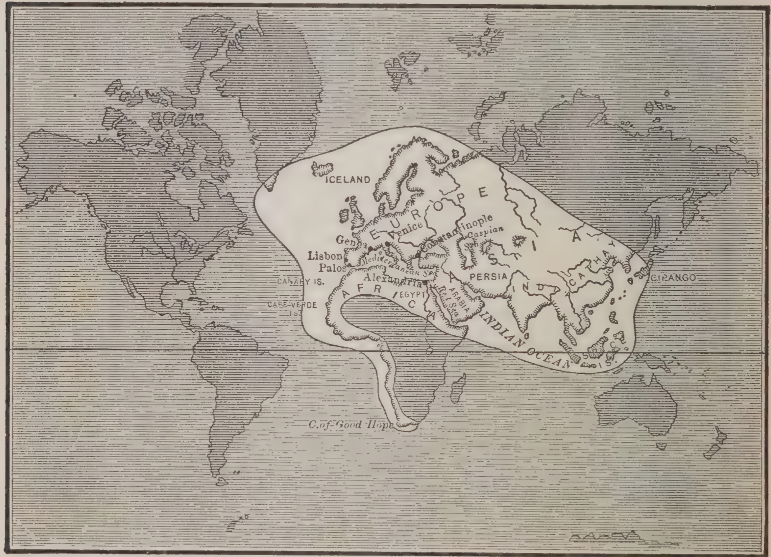
Henry of Portugal. — Italians were, in general, the guides who led Europeans through the seas of darkness to the East. Conditions at home, however, forced them to seek service abroad in realizing their plans, and Portugal was the first of the European countries to effect great oceanic discoveries. The country was small and undeveloped, but it enjoyed in the fifteenth century the guidance of a singularly able line of kings. It had in the person of Prince Henry, "the Navigator," an enthusiast who devoted practically his whole life and fortune to the cause of discovery. When but twenty-four years old he retired from the world to a promontory at the southern extremity of the country, and there he worked for over forty years, until his death in 1460. Prince Henry combined the commercial motive with missionary zeal and a medieval hostility to the Mohammedans, but the character of his work was entirely modern and business-like. He gave what was most needed for success, organization; he attracted sailors and pilots from all Europe; stimulated development in the science and art of navigation; equipped and inspired expeditions.

148. Exploration of the West Coast of Africa; difficulties, real and imagined. — The great achievement of Portuguese navigation was the discovery of the sea route to India around Africa. The coast of the northwest corner of Africa was well known to sailors of several European countries, and the belief was current in many minds that circumnavigation was possible. Some Genoese sailors had actually attempted to reach India in this way in the thirteenth century, but they had disappeared without leaving a trace. There was all the difference in the world between the theory and the practice of European navigators; the limit of their voyages had practically always been Cape Bojador, far north on the west coast. A strong inshore current and short but furious storms made coasting dangerous. The coast of dreary sand dunes afforded no good anchorage; mist or dust dimmed the air and frightened sailors with the thought that they were actually entering the sea of darkness; Cape Bojador was a forbidding obstacle in that it projected far out beyond the coast line, and was supposed to be extended by perilous reefs. Furthermore, most people submitted to the opinion of ancient philosophers, that the tropics were uninhabitable by reason of the intense heat of a blazing sun, which approached nearer the earth in those regions.



See Sections 148–149.

149. Discovery of the Cape of Good Hope (1487) and of the sea route to India (1498). — Under the stimulus of Prince Henry the Portuguese passed Cape Bojador in 1434, and were rewarded on a more extended voyage about ten years afterward by the discovery of Cape Verde. The name, "Green Cape," is significant; the explorers had passed the southern edge of the desert and found a watered country with waving palms. In this enterprise, as in most others, the first steps proved to be the hardest. Though progress was steady it was slow, and at the death of Prince Henry in 1460 the Portuguese had not passed beyond Sierra Leone. They had, however, accumulated valuable experience and gained confidence; the long period of preparation fitted them to advance more rapidly as time went on. In 1471 they passed the equator, without the scorching that some had feared; and in 1487, under Diaz, they turned the southern extremity of the Continent, named by the sailor the Cape of Storms, but renamed Cape of Good Hope by the King, as an augury for the future. The illness and death of the King prevented the Portuguese from utilizing their discovery immediately; but in July, 1497, Vasco da Gama was despatched with a fleet bound for India, which anchored at Calicut (southwest coast; *not* Calcutta), in May, 1498. Oceanic commerce with India had begun, and the tolls and charges which had hampered trade by the land routes were things of the past.



Map of the known world in the time of Columbus.

150. Belief that Asia could be reached by sailing westward.

— While the Portuguese were pushing on down the west coast of Africa in their search for a route to India, the minds of some men were occupied with the thought that the same object could be attained more easily by sailing directly west from Europe. The earth was known to be round and was thought to be smaller than it actually is. Asia was known to be bounded by a sea on the East. Why not reach India by sailing around the globe? Perhaps, they thought, the east coast of Asia was but a little way from the west coast of Europe or Africa. Skippers who ventured to the Azores, the Canaries, and other islands not far from Europe, brought back stories of foreign objects washed up on the beaches, or of land dimly descried on their voyages.

The belief that land existed beyond the horizon was commonly held, and Columbus does not deserve the credit of originating the idea. Nor can his discovery of the New World in 1492 be regarded as one of those acts without which the history of the world would be very different. The Portuguese were certain to touch America sooner or later in circumnavigating Africa, for they planned to steer due south from Guinea to the latitude of the Cape, to avoid the calms and currents of the coast, and an equatorial current carried their ships westward. Under these conditions the Portuguese Cabral, on his way to India around the Cape, actually did land on the coast of what is now Brazil, in 1500.

151. Discovery of America (1492); partition of the world outside Europe between Spain and Portugal. — Columbus, however, certainly deserves the fame which has been given him, for the courage he showed in turning theory into action; and the consequences of the discovery, however we apportion the credit for it, make it one of the turning-points in the world's history. Europe was disappointed, it is true, in the hope that a shorter route to India had been found. Balboa proved by the discovery of the "South Sea," or Pacific Ocean (1513), that the new land was a continent by itself, and the great distance between America and Asia became known by the voyage of Magellan around the earth (1519–1522), "doubtless the greatest feat of navigation that has ever been performed." Time was needed to prove that America offered more than Asia to build up European commerce, and the full measure of its possibilities was not realized until the nineteenth century. At the time Portugal seemed to have gained more than Spain. The non-Christian world was divided between these two powers by a papal decree, which gave to Portugal Africa and Asia (except the Philippines) and to Spain the Americas (except Brazil). So long as other European states obeyed papal authority and feared the might of Spain and Portugal, they were bound to respect this division; and the first period of discoveries was followed by a series of voyages, carried on especially by English and Dutch, seeking a passage northeast or northwest through Arctic seas, that would enable them to evade the monopoly granted by the Pope.

152. Effect of the discoveries on the field of commerce; growth of a world commerce. — Contrasting medieval and modern commerce we find that the discoveries produced great changes both in the area and in the articles of trade. Maritime commerce in the Middle Ages was restricted in general to the seas of Europe (Baltic, North, Mediterranean, Black) and to the edge of the Atlantic; exchange was hindered not only by physical obstacles but also by the claims of various states to the exclusive control of inland waters (Hansa in the Baltic, Venice in the Adriatic). When once sailors had learned to leave the coast and steer boldly into the open ocean, secure in the consciousness that they were approaching not a "sea of darkness" but a land much like that which they had left behind them, the ocean became a means of uniting continents rather than of separating them. The principle that the sea is free to all was not accepted, it is true, for some time; states tried to extend to the open sea the same narrow principle of exclusion that had been practised with respect to interior waters. These claims led to bitter national conflicts in the sixteenth and seventeenth centuries, but they fell gradually into oblivion as the hopelessness of making them effective became apparent; and the European commerce of a former period expanded into a world commerce.

153. Effect of the discoveries on the wares of commerce. — Europe had become acquainted with Asiatic wares in the course of the Levant trade, so that the market for them was well established when the first Portuguese ships returned from India. Transportation by the sea route, however, with its diminished costs and with the greatly increased cargoes, caused such a decline in the price of eastern goods that the market for them expanded immensely. What had before been costly luxuries for the rich became now a part of their regular necessaries, and became for other classes luxuries or comforts which they could afford to purchase. It is in this period that tea, coffee, and sugar became common articles of consumption in some of the European countries. The part played by those three articles in the commerce of an advanced country can be seen from the fact that before the end of the eighteenth century they formed *over one fourth* of the total imports of England. Other wares, such as Indian textiles, which had been known to Europe before, but which were too bulky to pay for the import of cheaper grades, could now be placed on the market in large quantities, when protective duties did not exclude them.

154. Importance of the precious metals in the American trade; effect on prices in Europe. — The American continent offered at first only one class of wares of prime importance, namely, the precious metals. The Spanish secured great quantities of gold in the early years of their conquests, but about 1550 the output of gold was exceeded by that of silver, which reached enormous proportions, as a result of the discovery of new mines in Mexico and Peru, and by the use of the amalgamation process. Before 1550 the production of the precious metals in Europe and Africa exceeded the supply from the New World, but then the balance changed; and during the seventeenth century the American supply was more than fivefold that gained in the Old World. The result was an increase in the stock of money in Europe so great that a revolution in prices ensued; silver became so plentiful that a given weight of it would purchase only one half or one third, sometimes even one fourth or one fifth, of what it would have bought before the discovery of the American mines. The serious results of this price revolution on different classes in Europe must be left to the imagination of the reader, as they lie outside the scope of this manual. No other American product competed in importance with silver, in the early period, but as the North American continent and the West Indies were settled with whites and negroes some important staples were brought from those parts to Europe. The islands proved to be especially well suited to the production of sugar, while the mainland contributed in tobacco a ware before unknown in Europe, but one which could soon rely on a large and increasing demand. Food staples like maize and potatoes continued unimportant, not only as wares of commerce but also as articles of European production, until comparatively recent times.

155. Improvement in the means and methods of navigation. — With the extension of navigation new qualities were needed in ships; speed to cover the great distances, carrying capacity for the storage of bulky cargoes, and stability sufficient to ensure safety in tropical hurricanes or eastern typhoons. The medieval galley, rowed with oars, was, of course, unsuited to long voyages, and sails came into universal use. The favorite types of vessel all showed, however, the influence of medieval models. The caravel, of small tonnage and easily managed, was simply a galley fitted with masts and sails. The galleon was larger, having two or three decks; in it the attempt was made to unite the lines and speed of a galley with the stability and dimensions of a cargo carrier. Finally, the carrack, with four or five decks, combined great carrying capacity with the defensive strength of a floating fortress. Piracy continued to be a plague, especially in the Mediterranean and in waters outside Europe, and the large merchantman with a considerable number of guns enjoyed a great advantage over smaller vessels. We read of ships of a thousand tons and over. The size of the Hanseatic ships trading to London increased so much in the sixteenth century that they could no longer pass London Bridge, or lie at the wharf of the Steelyard; and the increase in the size of ships caused changes in the importance of ports, by which Seville gave place to Cadiz, Rouen to Havre, Dordrecht to Rotterdam.

Improvements were effected also in the art of navigation, especially in the means of determining the position east and west. The simple means of the later Middle Ages could give some idea of a vessel's latitude, but very little of its longitude. The introduction of the log in the seventeenth century enabled a sailor to measure distance traversed more accurately, and the invention of the chronometer in the eighteenth century gave at last a reliable and practical means of determining longitude at sea. Progress in scientific astronomy was made of service to sailors by tables which were the forerunners of the modern "nautical almanac"; and charts and sailing directions became, as the result of generations of experience, more trustworthy and more useful.

QUESTIONS AND TOPICS

1. Character and life of Prince Henry of Portugal. [E. G. Bourne, Prince Henry the Navigator, Yale Review, Aug., 1894, 3: 187–202, reprinted in Essays in historical criticism, N. Y., 1901; or one of the readings in the bibliography.]

2. Measure on the map the distances traversed in the voyages in search of the sea-route to India; indicate these distances on a straight line, with the dates, that the rapid increase in the extent of the voyages may be apparent.

3. Early life and first voyage of Columbus. [Bourne, Spain, chaps. 1 to 3.]

4. Early Christian pilgrimages to the East. [Beazley, chap. 1.]

5. European explorers in Asia. [Cheyney, chap. 3; Verne, vol. 1, part 1; Beazley, chap. 3.]

6. Write a report on one of the countries of the East visited by Marco Polo. [See the translation of his travels.]

7. Development of geographical science before 1500. [Beazley, Introduction, chap. 5.]

8. Make tracings of typical maps, of antiquity, of the Middle Ages, and of the period of the great discoveries; and compare them with a modern map of the world. [See maps in Beazley and Cheyney.]

9. Maritime exploration before the fifteenth century. [Beazley, chap. 4.]

10. What were the means and methods of navigation in the fifteenth century? [See Cheyney, p. 53 ff., and Fiske, Discovery.]

11. Voyages in search of a passage to India through the Arctic Ocean. [Oxley, Romance, chap. 6; Verne, vol. 1, part 2, chap. 3; or Payne.]

12. Write a report on the history of tea, coffee, or sugar as a ware of commerce. [Use the references suggested for wares of the Levant or Baltic trade.]

13. Write a similar report on gold, silver, or tobacco.

14. Effect of the fall in value of silver in England. [Cunningham, Growth, vol. 2, sect. 182.]

15. Development of the art of navigation in modern times. [Encyc. Brit., Navigation.]

BIBLIOGRAPHY

Classified bibliographies of the period of the discoveries will be found in Cheyney, and in Cambridge modern hist., vol. 1.

General accounts will be found also in those two sources. Cheyney's ** European Background includes some half dozen chapters on important topics in the history of commerce; these chapters offer, in some cases, the only available reading in English, and the book can be warmly recommended. Another book, which is inexpensive, readable, and very valuable, is Beazley's ** Prince Henry; this is full on the beginnings of exploration, and has an especially good collection of early maps. The first part of Fiske's ** Discovery of America presents an admirably written survey of conditions leading to the explorations. The first volume of the Exploration of the World by Jules Verne, N. Y., Scribner, 1879, 3 vols., covers the medieval period as well as that of the great discoveries; it has the merits and failings which the author's name suggests.

For Prince Henry and the Portuguese discoveries see ** Beazley, Stephens, Portugal, chap. 7, Cheyney, chap. 4, or, for a brief and readable account, Oxley, Romance, chap. 7.

For the period following the discoveries, E. J. Payne, Voyages of the Elizabethan seamen, London, 1880, can be recommended; it contains original accounts of the exploits of the great English seamen of the time of Elizabeth (Hawkins, Frobisher, Drake, etc.). Howard Pyle, * The Buccaneers, N. Y., Macmillan, and David Hannay, The sea trader, London, 1912, continue the narrative to a later period.

CHAPTER XVI

DEVELOPMENT OF THE ECONOMIC ORGANIZATION

156. Agriculture. — The next important subject to be discussed in considering the great changes in commerce in the modern period is the development of the economic organization. The influence of the discovery of new lands, new routes, and new wares is so obvious that the discoveries are often represented as the chief cause of the growth of commerce in the modern period. They were unquestionably very important factors in this growth, but European commerce was developing without them, and would have felt their influence much less if it had not been changing in its internal structure. Men were applying new methods of cooperation, which enabled them to make more of their resources at home and to utilize with greatest effect the opportunities for gain abroad. Even at the end of the period the commerce of England with Europe was larger than with all the other continents together.

We shall review briefly in the following sections the main changes in the different branches of production. The topic of agriculture must be dismissed with but a few words. There was a general movement toward freedom of the agricultural classes of western Europe at the beginning of the period. Wars and other political interruptions checked the movement in France, and brought about an actual decline of the cultivators in Germany; England was the only important country in which the country classes became perfectly free. In Europe as a whole, however, the conditions of production in agriculture were decidedly better than they had been in the Middle Ages, and the increased product supported a larger population and furnished a basis for a more extended trade.

157. Development of manufacturing organization in England; persistence of gild restrictions elsewhere. — In manufactures, also, there was a movement toward freedom in the more favored countries. We shall see, in the history of England, how greatly English manufactures, and the commerce depending on them, advanced under the leadership of merchants and capitalists who broke through the old gild restrictions. The striking feature, however, in the manufactures of most countries of this period is the maintenance of the gild system, which became a most serious check on industrial advance. It will be remembered that the gilds grew originally out of the union of artisans in any trade, who banded together to protect their interests, and who were granted certain privileges, especially that of monopoly, that they might regulate the trade more efficiently and so protect the interests of consumers also. At the present time the interests of consumers are sufficiently protected by the competition of producers, who do not need government regulations to tell them that they must sell good wares at low prices if they desire to succeed; and just as soon as exchange becomes sufficiently active to stimulate competition the public gains by having restrictions abolished. In most of the European countries, however, the gild privileges and restrictions were retained until the nineteenth century, with results set forth in the following paragraph.

158. Evils of the gilds. — (1) The privilege of monopoly was abused by limiting entrance to the gild in various ways, so that production was restricted and prices were raised to the detriment of merchant and consumer. Laborers suffered, also, by the lessened demand for their services. (2) Gilds came into frequent conflict over the question as to which had the right to exercise a particular branch of trade or manufacture; these quarrels were similar to those arising between trade unions at the present time. Manufacturers suffered from the separation of allied trades; and time and money, which ought to have gone into the business, were wasted in long lawsuits. (3) The full members of the gilds, the masters, tried to keep the laborers (apprentices and journeymen) in an inferior position, and granted promotion by favor rather than by merit; laborers lost the incentive to good work and were tempted to idleness and disorder. (4) The masters tried to preserve equality among themselves. Any master who was sufficiently enterprising to attempt to extend his business by introducing improvements or by employing more men was pulled back to the general level. (5) Technical improvements were prevented also by the regulations which were adopted originally to secure good quality of the product, but which hardened into a routine prescribing the details of every process of manufacture. (6) After all the restrictions, consumers did not get good quality even when they paid high prices. They could not punish the producers of poor goods by withdrawing their custom; and scamped work, adulteration, and fraud were common.

159. Development of the commercial organization. Rise of wholesalers. — Reviewing the substance of the last few paragraphs we find that the advance in agriculture was local and incomplete, while in manufactures it failed, in great measure, to displace a wornout system inherited from a preceding period. Only in commerce itself were the changes rapid and general in western Europe. Methods of business which before had been practised in only a few Italian cities, were now adopted in the country north of the Alps, and developed rapidly in the leading commercial districts.

A class of professional wholesale merchants now sprang up. Before this time, of course, merchants had on occasion dealt in considerable quantities of wares, but even the leading medieval merchants seem to have been glad to keep up their business by selling in small quantities to consumers. Only in the last century of the Middle Ages do we find in Germany merchants who confined themselves entirely to wholesale trade. As yet they had not become specialists in any one particular ware. An idea both of the variety and of the extent of their transactions can be gained from the business of John von

Bodeck, who was a merchant in Frankfort about 1600. He bought silk and drugs in Venice, spices in Amsterdam, and sent them for sale to Hamburg; he bought iron and wax in Hamburg and sent them to Spain; he bought indigo and wool in Spain and sent them to Amsterdam and Antwerp; he bought rye in Amsterdam and sent it to Genoa.

160. Development of the commission trade; services of factors. — Bodeck must have traded in these wares often without knowing much about them himself, and generally without seeing them. Such a business would have been impossible in the Middle Ages when a merchant accompanied his wares or shared his responsibilities with a few associates. It was made possible now by the development of the commission trade. Commission merchants, or factors, made it their profession "to buy and sell for other business men for a certain profit which is given them for their trouble by the principals." Sometimes they were in business on their own account also; sometimes they were specialists in various lines. A writer of the seventeenth century distinguished five classes: those who lived in a manufacturing or commerical center and bought goods for others; those who sold goods for others; the correspondents of business men and bankers who made collections and remittances of money for them; forwarders, who received and forwarded goods at places of transshipment; and, finally, the agents for carriers, who distributed and collected the load of a freight wagon in a city. The duties of a mercantile factor, in general, were to advise his principal frequently concerning the market for wares, the course of exchange, etc., to acknowledge letters punctually, and to follow orders exactly. The commission varied from 5 per cent of the value of the goods in the West Indies to 2 per cent or even less in some of the European countries.

161. Improvement in means of communication; posts. — Commission business of the kind described in the preceding paragraphs implied much greater frequency of communication among merchants, and it is noteworthy that the system of public posts was founded in Europe about the beginning of this period, and developed rapidly during it. Relays of horses with postilions and with the necessary officials were established by the governments of various countries, to insure regular communication; the system was meant at first only for official business, but was soon extended to serve the needs of private individuals. Some idea of the advance can be got from a statement made at the opening of the railroad from Strassburg to Basel, giving the time required to go from the one to the other of these places in earlier times. The distance, about seventy-five miles, or less than the distance between New York and Philadelphia, was covered in the sixteenth century by a coach in eight days, in 1600 by a diligence in six days, in1700 by the same vehicle in four days, and in 1800 by "express" (Eilwagen) in two days and a half. In the eighteenth century a man in England could send a letter fifteen miles for a penny, thirty miles for twopence, and so on up, the sum increasing with the distance; postage from London to France was tenpence, to New York a shilling.

Merchants needed no longer to rely upon the friendly offices of the traveler who happened to be going in the desired direction, and were free from the expense of special couriers. Knowledge of market conditions in distant places spread more broadly and more rapidly than it had ever done before. Shrewd speculators could still sometimes make great profits by getting possession early of some special bit of news, but the essentials of commercial information were available for all. The modern newspaper grew up, by several stages, from written reports that were passed around as circulars in this period, telling of the state of the market, prices, conditions of transportation, etc.

162. Need of closer association among merchants; risks of commerce. — The most striking change in the organization of commerce, regarding especially that with distant countries and other continents, was the growth of association among merchants. We have noted the development in the Middle Ages of the partnership and other forms of association; we have now to study the rise of great companies which form a connecting link with the corporations and trusts of the present day.

Among the reasons for the rise of great commercial companies the following are to be noted. (1) Distant commerce was exposed constantly to armed attack. The protection of a country's navy extended but a small distance from home. Ships in European waters were threatened by pirates in times of peace, by privateers in times in war; in waters outside Europe they faced trade rivals from other European countries, and hostile natives who were not bound by the civilized rules of peace and war. Distant commerce was essentially military in character, and required for successful prosecution greater military force than a small group of men could afford. (2) Partly because of dangers suggested above, partly because of the natural perils of the sea under the conditions of navigation at the time, partly because of the very novelty of the trade, distant commerce was very hazardous. If five men sent out a ship they might make a great fortune, but they might lose everything. If they associated themselves with ninety-five others and together sent out twenty ships they were pretty sure to lose some of these, but they were pretty sure to make from the other ships enough to return large profits.

163. Association required by government; reasons. — It was natural, under the circumstances, that associations of men should spring up for carrying on commerce in distant parts. We must note further, however, that these associations were required by European governments, that a certain field was assigned to each company in which it was given a monopoly, and that in this field trade by individuals and by other associations was prohibited. The reasons for this course were, in brief, as follows:

(1) The peoples of distant countries did not distinguish between individual merchants. As all Chinamen look alike to us, so all Englishmen or even all Europeans were alike to them. An unscrupulous trader, who cheated, robbed, or

killed a native, escaped the consequences of his crime and left them to be borne by his countrymen who sought later to carry on the trade. The home government could not punish such offences, and it could not afford to let them continue. It required, therefore, that a man proposing to trade to a distant country should have an interest in the permanent welfare of the trade, by making him contribute money to the association, and subscribe to its rules.

(2) The government could diminish the risks of distant commerce by assuring merchants who spent money in building up a trade that they should not be deprived of the fruits of their labors by newcomers who had made no sacrifices. It seemed as proper to encourage in this way the investment of capital in commerce as to encourage investment in manufactures by granting patents.

(3) Finally, governments were led naturally to apply the prevalent ideas of gild regulation to distant commerce, and found some practical advantages in doing this; it was easier to tax and to regulate an association of men than a number of individuals.

164. Association in the form of the regulated company. — Many of the objects enumerated above could be obtained by union in what was called a "regulated company." The regulated company had a monopoly of a certain field of trade, and established regulations which were binding on the members trading in that field. Every one, however, who secured admission by paying the entrance fee and promising obedience to the rules, traded thenceforth with his own capital, and kept his profits for himself; there was no pooling of capital or profits. The character of such a company may be suggested to readers by the organization of the modern stock exchange. No one who is not a member can trade on the exchange, and every member is bound to follow certain rules in his dealings, but every member keeps his capital and profits distinct from those of the others.

The larger part of the early English commercial companies were regulated companies of this kind. To a certain extent they attained the objects of association which have been enumerated above; some of the worst evils of individual trade were impossible so long as the company adopted wise regulations and could force members to live up to them.

165. Objections to the form of the regulated company. — Still, the regulated company was at best a loose association. Individual traders had no greater interest in it than the amount of their entrance fees, and regarded their momentary individual interests as more important than the permanent interests of the group. This weakened the control of the company over the associates, and rendered difficult the prevention of abuses. A strong and active policy was hardly possible, moreover, when associates kept the bulk of their capital in their own hands, and could withdraw in periods of adversity, so that the resources available to push the interests of the association diminished when most needed.

The problem set before Europe in this condition of affairs was as important as it was difficult. The future of European commerce, even of European civilization, depended on some solution which would make from the individual impulse to gain, the instinctive selfishness of every man, a collective force which would enable a number of men to work for gain together. The partnership had united the interests of a very few men, simplifying the problem by starting with members of the same family, who were naturally bound together. The relation of merchant and factor was another move in the right direction, as it united in loyal support of each other two men separated by considerable distance, and with no other common interest than that of their business. The principle of association must, however, be extended far beyond the bounds of factorship, or partnership, or of the regulated company, if Europe was to rise to the opportunity presented by trade with distant countries.

166. The joint stock company, and its advantages. — The problem, reviewed briefly, was to get: (*a*) a permanent stock of capital, (*b*) so large that it must be contributed by a very considerable number of people, (*c*) under the management of a few people who would employ it efficiently, and for the advantage of all the contributors. The solution was the joint stock company. Early examples of this form of association are to be found in Italy, but it developed north of the Alps only after the founding of the Dutch and English East India Companies about 1600.

Let us see how the stock company meets the demands for an improved form of association which were imperative at this time. (1) It insures permanence of operation. Individual stockholders or managers may die, but the company does not die with them; their places are filled, and the company continues with its original capital. (2) The contributor does not, like a partner, need to be a business man; does not, like a silent partner, need to have especial trust in the person of the managers. The contributor may be a foreigner, a child, or a woman, and the sources from which capital may be drawn are thus immensely extended. (3) Capitalists of every class are willing to contribute to the undertaking because of the peculiar safeguards which this form of association offers to them. In the first place, though the investment is permanent, from the standpoint of the company, and so enables the management to carry out far-sighted plans, yet it endures, from the standpoint of the individual subscriber, only so long as he pleases. The system of transferable shares enables a stockholder to sell out his interest at any time, and so change his investment. In the second place, the stockholders have a voice in the management of the company proportionate to their interest in it. They choose the persons to whom they will entrust the active direction of affairs, require periodical reports on the course of business from the managing directors, and have the power to change the directors if the conduct of affairs is not satisfactory.

167. Good and bad sides of joint stock companies. — The reader would err if he assumed that all the advantages suggested above were secured immediately on the founding of the first stock companies. Experiments of various kinds were tried at the start, and only gradually did the companies take the form which they have assumed in modern law. The English East India Company, for instance, which was founded in 1600 as a regulated company, was made over into a joint stock company by degrees, and could not be regarded as permanently established on this basis for over fifty years. Generations of bitter experience were required to teach people the possible dangers as well as the possible benefits of this form of association.

Incompetence and corruption were prevalent in the management of affairs. The worst abuses of our modern corporations give one but a faint idea of the enormities that were perpetrated in the early period of joint stock history. In spite of all, the joint stock companies accomplished the purpose for which they were created; they attracted capital at home, stimulated the prosecution of a definite policy abroad, and extended commercial interests as individuals or other forms of association would have been unable to do. The American reader may remember that Virginia was founded and Massachusetts was developed by joint stock companies. Other forms of association, especially partnership, were more suitable for many purposes, and increased constantly in number; but alongside them several hundred stock companies grew up in Europe of which perhaps a hundred were founded to develop great commercial and colonial undertakings.

QUESTIONS AND TOPICS

1. Write a report on the break-up of the manor and the rise of modern farming in England. [Cheyney, Indust. hist., chap. 5, or one of the other manuals of English economic history.]

2. Write an essay comparing the restrictions of the gilds with those of modern trade-unions.

3. What are the functions of wholesale merchants and hence what was the importance of their rise at this time?

4. Who were some of the notable merchants of the period? [Bourne, Romance, chap. 12, or English merchants.]

5. What examples can you find nowadays of the different classes of commission merchants mentioned in the text? What commission do they charge?

6. Write a report on the rise of the modern postal system. [See Encyc. Brit., articles Post-office, Postage stamps.]

7. Write a similar report on the history of the newspaper. [Encyc. or Bucher, ** Indust. Ev., chap. 6.]

8. Endeavor to understand the reasons for mercantile association, and for the requirement of this association by the government, by reviewing the changes in conditions since this period, and seeing why association is not necessary or compulsory now.

9. Study Cunningham, Growth, vol. 2, sect. 188, on regulated and joint-stock companies, and pick out examples of each type in the following sections.

10. Write a report on the various forms which the (English) East India Company assumed during the first century of its existence, and the reasons for the changes. [Cunningham, or Hunter, ** Hist. of British India.]

11. Write a report on abuses and corruption in this company. [Hunter.]

BIBLIOGRAPHY

A bibliography accompanies the chapter by Cunningham on ** Economic change, Cambridge mod. hist., vol. 1, which furnishes the best brief account in English of topics considered in this chapter.

Histories of various countries at the period of the Reformation present descriptions of their agricultural, industrial, and commercial organization; but I know of no general and comprehensive treatment in English of topics treated here.

The only topic on which there is abundant material available is that of commercial organization. See Cheyney, ** Eur. background, chap. 7 (chartered commercial companies), chap. 8 (typical American colonizing companies); Hewins, ** English trade, chap. 3 (trading companies); Hunter, Hist. Brit. India (East India Co.). R. B. Westerfield, * Middlemen in English business, Trans. Conn. Acad., May, 1915, 19; 111–445, is a scholarly study of the development of the organization of marketing, and W. R. Scott, * The constitution and finance of joint-stock companies, Cambridge Univ. Press, 3 vol., 1910–1912, is an authoritative work on the history of that subject.

CHAPTER XVII

CREDIT AND CRISES

168. Growth of credit business and of banking. — The rise of the joint stock companies was a great step in the development of the power of capital and of credit. Individual savings, which before might have been hoarded and made useless to society, were drawn from their hiding-places to form the capital and loans by which the great companies extended the scope of commerce in this period. Another step in advance, which deserves notice here, was the extension of banking north of the Alps. The medieval doctrine that it was wrong to take interest on loans lost its force when it appeared that loans were wanted by merchants who would put them to a good use; and society concluded that it was wise to encourage the lending of money by permitting the lender to take interest for it. There is a great difference, however, between the lending by an ordinary individual, who has more than he knows what to do with, and the business of lending as practised by a banker. The difference is this, that an ordinary individual lends his own money, while a banker lends that of somebody else. When credit operations have become sufficiently extensive the banker appears as a man who makes dealing in credit his profession. He steps in between the people who have capital but lack the ability or inclination to employ it profitably, and the people who have the ability and inclination to conduct business enterprises but lack the desirable amount of capital. The banker is a specialist in this profession, and by his special knowledge can do more than any one else could to collect the surplus capital and place it where it can be used to the best advantage.

169. Description of the rise of discount and deposit banking in England. — The history of banking is too large a topic to be considered here in detail. The early banks were marked by a number of individual peculiarities, and occupied often a public position as agents of the government; these points need not detain us. The development of ordinary commercial banking can be illustrated by the business of the London goldsmiths in the seventeenth century. The goldsmiths were required by the character of their stock to keep strong-boxes ("safes"), which served the purpose of a modern safe-deposit vault; and they united dealings in gold and silver coin with their original business. They were naturally the persons to whom a man would apply who wanted the means of keeping cash and other valuables more securely than was possible on his person or at his office or home; and thus they received in time considerable deposits from merchants and others. Probably they made some charge at first for the accommodation, but soon they were encouraging deposits by paying some interest, and by undertaking to perform services such as collection and remittance for their customers. They could afford to do this by reason of the fact that they did not let the cash lie idle in their vaults, but lent it to the government and to business men; they had become banks of discount and deposit. A tract published in 1676, entitled "The Mystery of the New fashioned Goldsmiths or Bankers," gives this account of their operations. "Having thus got Money into their hands, they presumed upon some to come as fast as others was paid away, and upon that confidence of a running Cash (as they call it) they begun to accommodate men with moneys for Weeks and Moneths, upon extraordinary gratuities, and supply all necessitous Merchants that overtraded their Stock, with present Money for their Bills of Exchange, discounting sometimes double, perhaps treble interest for the time, as they found the Merchant more or less pinched."

170. Rise of "money-power" as shown in the history of the Fugger family. — The reader will perhaps comprehend more clearly the great development of business in the modern period if we follow here the history of one of the families of South Germany which rose to the first rank among the money powers. The Fugger family was descended from a simple country weaver, who settled in Augsburg and died there in 1409. His sons rose to high place in the crafts of weavers and merchants, and accumulated wealth, like many others, by trade in spices, silks, and woolen cloth. Under a grandson, Jacob (1459–1526), who had been trained in Venice, the family business underwent a striking change. We should call Jacob a financier rather than a merchant. He and his brothers continued, it is true, to deal in merchandise, but they made their great profits by dealing in money and capital. If a prince or king wanted a loan they made it to him, charging a good round sum in commission and interest, gaining often a security for their advance, such as a mine or the right to collect some taxes, from which they could make good profit. If a king like Charles V, whose dominions were widely scattered, wanted to disburse some of his revenues in a distant province, they undertook to sell him the necessary exchange and avoided the transportation of the coin itself. Their business extended from Hungary and Poland in the East to Spain in the West, from Antwerp in the North to Naples in the South.

171. Description of the Fugger business. — The records of the Fugger firm have been preserved, and we can learn the extent and character of its business by the statement of its resources as they appeared in 1527. The figures are in florins, of which each had a purchasing power equal roughly to eight dollars to-day.

Mines (Tyrol, Hungary)	270,000
Other real estate (city and country)	150,000
Merchandise (copper, silver, brass, textiles)	380,000
Cash (in home office and 14 factories)	50,000
Loans	1,650,000
Private accounts of associates	430,000
Various current affairs	70,000
	3,000,000

The reader will note the large sums appearing under mines and merchandise, showing that the Fuggers still maintained their dealings in wares, after they made finance their special business. The chief item, however, is that of loans, which included sums borrowed by the Pope, the Emperor, and kings of Europe. The Fuggers and other great financiers had immense influence on the politics of their time, for they could command money and credit while sovereigns were still trying in vain to build up an adequate revenue system. They made fabulous profits, over 50 per cent a year, in prosperous periods, and the Fuggers managed to make an average profit of over 30 per cent a year for over thirty years. In the case of most firms, however, there were lean years as well as fat ones, and the general average would be very much less. More striking than the rate of profit is the increase in the size of the capital. Taking two Italian banking firms, the Peruzzi about 1300, and the Medici about 1440, and comparing them with the Fuggers in 1546, we find that the capital was about as follows, expressed in modern purchasing power: Peruzzi, $800,000, Medici $7,500,000, Fuggers $40,000,000.

172. Weakness of the Fugger and other banking firms. — The great financial firms of the sixteenth century seem to have been premature. They lacked the permanence of the later joint stock companies, for they still retained the medieval form of a company based chiefly on family relationship, and required constant reorganization. Their success in the hazardous operations of the time depended entirely on the sagacity of the heads of the family, and as genius cannot be transmitted indefinitely they went to pieces ordinarily in the third generation from their establishment. The head of the Fugger firm about 1550 tried to wind up the business and withdraw the capital, but found it impossible to do this, and became involved in more and more enterprises. The balance of the firm in 1563 showed decided weakness; members of the family began to quarrel among themselves; and the firm finally lost in unfortunate loans practically all its accumulations. The bankruptcy of one of these firms involved wide-spread disaster, for as time went on they carried on their business less and less on the money contributed by members, and more and more on their credit. All classes in the community — nobles, burghers, peasants whose savings did not exceed ten florins, even servants — deposited their money at interest with the financiers, and were involved in their fall.

173. Description of business in Antwerp in the sixteenth century. — After considering the new forms of business from the standpoint of individual firms it will be profitable to study them in the city that was the business center of the time, where all the great firms were represented by agents. This city, in the first part of the sixteenth century, was Antwerp, which rose as the medieval port of Bruges declined. There have been, of course, greater cities and greater markets since that time, but never before or since, it is said, has the world seen such concentration of the trade of different peoples in a single place. The town owed its development almost entirely to the foreigners who flocked there to trade, and though it saw less of Italians and Hanseatics than Bruges had done, it was the one great gathering place for the Portuguese, Spanish, English, and German merchants who were now the leaders. It is said that over five hundred vessels sailed in or out of the port in one day, and that the English merchants alone employed over 20,000 persons in the city. The poet Daniel Rogiers said of the Antwerp exchange, "One heard there a confused murmur of all languages, one saw there a motley mixture of all possible costumes; in short the Antwerp bourse seemed to be a little world in which all parts of the great were united." In contrast with Bruges, trade in Antwerp was almost entirely unrestricted, and this was perhaps the chief reason why the merchants of the time selected it as the place in which to develop the new forms of business.

174. Rise of the Antwerp exchange; its significance. — Antwerp presented in the sixteenth century the first case of a great bourse or exchange, that is, a place in which men meet daily and effect their exchanges without displaying and transferring the wares themselves, by the use of paper securities representing the wares. Such an institution cannot exist until the volume of trade is large enough to cause a steady and continuous flow of wares, in contrast to the spurts that marked the period of the fairs. It requires, moreover, that the objects dealt in be of such a kind that they can be represented at the exchange by some document or sample, so that the buyer can learn the quality of the ware without actually inspecting it. This is possible when a ware can be *graded,* put into a certain class the characteristics of which are so closely defined and so well known that the buyer needs only to decide whether he cares to take a certain quantity at a certain price.

175. Development of business on the exchanges; produce and money. — The use of the word "ware" in the foregoing description may suggest the produce exchange as the earliest and most important form of the exchange. Produce of various kinds, especially pepper, did form an object of exchange trade in Antwerp; and there was a considerable development of the produce exchange later in Amsterdam. At the "candle-auctions" on the Royal Exchange of London in the seventeenth century, goods were offered with an inch of lighted candle on the desk, and were knocked down before the candle went out; a single parcel of silk, indigo, or spice sold in this way was sometimes worth half a million dollars. The produce exchange, however, did not reach its full development until the nineteenth century, and we shall leave its significance in the commercial organization for later consideration.

The "ware" which formed the main object of trade on the Antwerp exchange was loanable capital, represented by various paper instruments. Princes who desired to borrow money, and who formerly would have applied to individual financiers like the Fuggers, turned to the exchange of Antwerp or of Lyons, where loanable capital from all over Europe was collected. Through the medium of the exchange a French king could and did borrow money of a Turkish pasha; and it was said that payments amounting to a million crowns were made in a single morning without the use of a penny of cash.

176. Advantages offered to industry and commerce by the exchanges. — Antwerp and Lyons had served especially political needs in their loans; they were embarrassed by the insolvency of royal debtors, and soon declined. Their place was taken by Amsterdam, London, Hamburg, Frankfort, and other cities, and with the rise of these new money centers a change of importance is to be noted. The new exchanges attracted capital for investment in private or semi-private economic undertakings, serving the needs of the new companies which were being established. Ordinary people with comparatively small savings would not have known (as they would not know now) where to invest their money if they had not had the stock exchange to turn to for an indication of enterprises seeking capital, and of the current price of the stock. The stock exchange was the natural and necessary accompaniment of the stock company.

Shares of trading and industrial companies and of public debts became the objects of a regular commerce, which was not confined by national boundaries, but which drew capital from all sources. When shares of the Dutch East India Company were put on the market in 1602 they were taken up to a considerable extent by capitalists of Antwerp who no longer had use for their money at home; much of the money needed to rebuild London after the fire of 1666, and a large part of the capital of the Bank of England, came from the Dutch; shares of the English companies trading with Asia and Africa circulated freely on the Amsterdam exchange; a loan to the German Emperor was floated in London.

177. Growth of speculation; early abuses. — Modern forms of speculative business grew up with the exchanges. A pamphlet published as early as 1542 described the "monstrous thing" that Antwerp merchants had devised; they *bet* with each other on the course of foreign exchange, one saying it would be 2 per cent, one 3 per cent, etc., and afterwards they settled by paying the differences. This is substantially the same operation as that which is carried on regularly to-day. When the trade in shares of stock was established traders would speculate on a rise or a fall, or a combination of both. Shrewd speculators organized a system of news gathering and forwarding which gave them the first knowledge of important events affecting the price of securities, and enabled them to anticipate the turn of the market. London speculators got word through a private channel of the signing of the treaty of Rijswijk in 1697, a day before the English ambassador arrived with the official announcement; their eagerness to buy bank stock aroused suspicion, and the reason for their purchase appeared when the news was published and the price of the stock rose from 84 to 97.

Underhanded methods of trade were common. Speculators would set afloat rumors to depress the price of securities, and then buy in. One day during the reign of Anne in England a well-dressed man rode furiously through the street proclaiming the death of the Queen. The news spread and the funds fell; the Jew interest on the exchange bought eagerly, and were suspected later of being responsible for the hoax, though it was not proved against them. The Englishman, Child, who made a fortune in speculation, and who was called in a pamphlet of 1719 "the original of stock-jobbing," would have one set of brokers spread rumors of disaster, and sell a little of his stock publicly, while another set bought for him "with privacy and caution"; in a few weeks he would reverse the process and come out ten or twenty per cent ahead.

178. Dangers of the new system of business; promotion of unprofitable enterprises. — The appeal of joint stock companies to the public through the medium of the stock exchange proved to be so effective in gathering capital that a great many worthless undertakings were floated. When times were good, that is, when enterprises had proved successful, when people had saved money for investment and looked with confidence to the future, almost anything in the shape of a company could get subscribers to its stock. The reader should note that there were two sides, one good and one bad, to the new methods by which commerce was being developed. The facility of getting capital from a great number of subscribers made possible more and larger undertakings than had been known before, and was an unmixed benefit when the new undertakings were devised to fill a real need of society. There was, however, a separation before unknown between the subscriber and the undertaking; the contributor of capital might be entirely ignorant of the economic basis of the enterprise, and might sink his money for a return which came late or not at all. There was thus a chance for the diversion of the capital of society to worthless purposes; the business organization had become more powerful, but at the same time more delicate and subject to derangement. We find in this period the beginning of commercial crises marked by the misdirection of invested capital, disappointment of investors, and distrust and lethargy, until spirits rose with the recovery of lost ground, and good times began again.

179. Description of the "Bubble Period" in England. — Commercial crises occurred in all of the advanced countries during this period. We shall not, however, attempt an enumeration of them here, but shall use the available space for a description of the most important crisis, that which affected both England and France about 1720.

The crisis in England was closely connected with the course of the South Sea Company, which had been established in 1711 as a trading corporation. The company had secured the right to export slaves to the Spanish colonies, had developed a promising whale-fishery, and was thought to be a large and flourishing concern. It was then transformed into a financial company, with the bold plan of assuming the whole national debt, for which it made extravagant offers. "The large sum offered by the company, which made success impossible, stimulated the imaginations of the people, who fancied that a privilege so dearly purchased must be of inestimable value, and the complication of credulity and dishonesty, of ignorance and avarice, threw England into what it is scarcely an exaggeration to term a positive frenzy."

All classes rushed to buy the stock, which at one time was quoted at 1,000. Then the weakness of the scheme became apparent; the stock fell as rapidly as it had risen, and investors or speculators were ruined in large numbers. This was only one of the bubbles which were inflated and which burst about this time. Other companies were promoted for making salt water fresh, for extracting silver from lead, for trading in human hair, and for a wheel of perpetual motion. Insurance was now coming into prominence, and this offered a favorite field for promoters. Subscriptions were received for companies that proposed to insure against losses of servants, against burglars and against highwaymen; one scheme was "Plummer and Petty's Insurance from Death by drinking Geneva" (gin). We get a vivid idea of the spirit of the period from the fact that one promoter, who announced a company "for an undertaking which shall in due time be revealed," secured 2,000 guineas in a single morning, with which he immediately made off.

180. The crisis of the Company of the Indies in France. — Just before the time of the English crisis one curiously similar in character occurred in France. A Scotchman, John Law, who was an able banker and financier, promoted a Company of the West, expanded later into the Company of the Indies, which united with its commercial projects an attempt to finance the government. Extravagant ideas were formed of the possibilities of Law's "system," and the roads to Paris were blocked by people hurrying there to speculate in shares. Two of the ablest scholars in France deplored the madness at one interview, and at the next found themselves bidding against each other. Coachmen, cooks, and waiters became millionaires by lucky speculation; tradespeople in the street where the exchange was established made fortunes by letting out their stalls and chairs. The price of stock rose until it frightened even the promoter of the system, who interfered in the hope of checking speculation, but who found soon that he was unable to check either the rise or the fall of the stock. The crash which quickly followed was especially serious, as the whole currency consisted now of discredited notes issued by the company. Ruin was widespread, and credit received a blow which made the promotion of legitimate enterprises difficult for a long time thereafter.

QUESTIONS AND TOPICS

1. Prepare yourself to see the significance of the facts of this chapter by reviewing the functions and benefits of credit institutions like banks. [See Bullock, Introd., chap. 9, or other current manuals of economics.]

2. Write a report on the way in which churchmen and scholars came to justify the taking of interest on loans. [Cunningham, Growth, or Ashley, ** Ec. hist., vol. 2, sect. 65 and others following, esp. 72.]

3. Fill in the outline of the text, sect. 169, by details to be found in Cunningham, Growth, vol. 2, sect. 180.

4. Write a report on the business career of Sir Thomas Gresham, one of the great English financiers of the sixteenth century. [Encyc., Dict. of nat. biography, and references in those sources.]

5. Write a report on Antwerp in the sixteenth century. [See Motley, Rise of Dutch Republic, N. Y., 1858, vol. 1, 81 ff., chap. 13.]

6. Benefits and dangers of speculation. [Hadley, Economics, chap. 4.]

7. Manias and panics, modern and recent. [Bourne, Romance, chap. 11.]

8. Write a report on one of the following topics:

(*a*) The tulip mania. [Oxley, Romance of commerce, chap. 3.]

(*b*) The "Bubble" period in England, [Cunningham, Growth, vol. 2, sect. 218; Oxley, chap. 2; cf. Lecky, Hist. of England, and cf. Macaulay's history of bubbles about the time of the founding of the Bank of England.]

(*c*) John Law and the Mississippi Bubble. [Oxley, chap. 1.]

(*d*) The Fugger family. [Paul Van Dyke, A captain of industry of the sixteenth century, Harper's Magazine, June, 1910, 120: 276–284.]

BIBLIOGRAPHY

As the subjects of this chapter have been treated generally by specialists, and considered in their relation to modern economics rather than earlier history, the reading is scattered, and, for our purposes, unsatisfactory.

The chapter by Cunningham in the first volume of the Cambridge modern history covers in part the ground of this chapter. The important commercial crises are described in the histories of England, France, etc.

CHAPTER XVIII

THE MODERN STATE AND THE MERCANTILE SYSTEM

181. Growth of modern states under the influence of commerce. — If the modern reader is impressed, in studying the history of Europe before 1500, with the influence on commerce of the lack of strong government, he will be equally impressed, in the period from 1500 to 1800, with the strength of government and with the important part it played in commercial development. We have here to sketch in brief the changes in political conditions, leaving to later chapters a consideration of the details as they appear in the history of different countries. Commerce itself was the great force that broke the power of feudalism. Commerce crept through the barriers that kept localities apart; it established a circulation of wares through a large area of country; and it concentrated wealth in the cities which it built up. These were the very changes needed to allow the world to escape from feudal anarchy, and to construct a system of government similar to that which the Romans had employed. Kings had now subjects able and willing to pay taxes, and, by means of commerce, they could transport their taxes, turn the proceeds into any shape they chose, and apply them wherever it was necessary.

182. Decline of feudal power with the rise of mercenary armies. — A large part of the new revenues was spent by governments in strengthening their military position. Feudal lords were good fighters in the old-fashioned way, and would not give up their local power without a struggle. They had to yield finally, however, before the standing armies which kings called into existence towards the close of the Middle Ages. Feudal lords loved to fight, but they were only amateurs, after all, and did not make fighting a business. The mercenaries, on the other hand, whom kings collected as soon as they could afford the expense, were professionals, who submitted to a certain amount of discipline because they could make a living by doing so. Enterprising men collected a number of recruits, taught them to use their arms, and drilled them until they counted for far more than an equal number of untrained men; the leaders studied tactics and strategy, and knew how to make the most of their superiority. The leaders were perfectly willing to let their troops to any one who could pay the price, but as feudal lords were always in want of ready money the advantages of the new armies went almost entirely to the kings. The introduction of gunpowder in warfare increased the superiority of the mercenary armies, by adding to the value of training, and here again the kings, with ready money to invest in the latest improvements, had an advantage.

183. Growth in power of the central government as shown in the development of taxation. — By the year 1500 the process had gone so far that many of the states of Europe had assumed a shape substantially like that which they have to-day; and feudalism as a great political force was dead. Government could now proceed to develop on the basis of an extended territory. Some measure of the gain of the central government in power can be had by noting the increase of its resources from taxation. English taxes yielded about half a million pounds in the sixteenth century, seven and a half million in the next century, and about forty million towards 1800. In little over a hundred years the yield of taxes in Prussia increased twenty-eight fold. The revenue system was still crude and wasteful. Every European state followed at one time or another the practice of raising money by selling the right to hold an office. Every European state lost money, not only by the inefficiency of the revenue system, but also by corruption of officials; often half or more of money that the people paid in taxes never reached the treasury. In spite, however, of these inevitable faults, national resources were concentrated as they had never been before, and the central government gained a power before unknown.

184. Persistence of medieval conditions in the modern period. — From the modern standpoint no better field could be found for the use of this power than in the reform of internal conditions. Centuries after feudalism had lost its controlling position the local differences and the spirit of separatism which marked the feudal period remained to plague the merchant and the statesman. Commerce was hindered by local variations in laws and in weights and measures; by the persistence of barriers to the development of trade and manufacture which had grown up in the medieval system of tolls and gilds; by the maintenance of the class distinctions marking feudal society, and putting on a different basis the merchant, the agriculturist, and the noble. A country like England, which early threw off the most oppressive of its medieval institutions, gained a great start over countries where they were allowed to continue. Statesmen in these other countries recognized the need of reform, and made attempts to realize it from time to time; they made slow progress, not only because the task of reforming old customs was at best tedious and expensive, but also because their attention was distracted from the task for much of the time by the pressure of foreign affairs.

185. Attempts at reform, leading in many cases to over-regulation. — All the European governments in this period did pay attention to the development of internal resources. One of the chief features of the mercantilist theory, that animated government policy during the seventeenth and eighteenth centuries, was the emphasis laid on the circulation of money and wares inside the country. The new national governments helped to further internal commerce by repressing disorder, and by reforming, to some extent at least, the system of laws and courts to which business men could appeal for the settlement of disputes. Most of the governments paid considerable attention also to the development of the postal system.

Governments could serve their people well in ways like these, but unfortunately they expended their energy on other objects that were useless or harmful. "The state moulds men into whatever shape it pleases," was an idea of the time, which led to an enormous amount of government regulation. In few states of the Continent was a man free to seek his profit where he would; he was entangled in a network of government regulations that fixed the rules of his trade, the prices of his wares, even the articles which he might or might not consume. An excellent example is furnished by the grain trade, which governments regulated so strictly that in many cases laws caused the very famines which they were designed to prevent.

186. Attention distracted from internal reforms by foreign interests. — A consciousness that government regulation had gone too far for the interests of commerce grew strong before the end of the eighteenth century, when a school of thinkers, the physiocrats, protested earnestly against it. Their formulas, "don't govern too much," "let things alone" (*laisser faire*), were to be realized in the nineteenth century. At the time, however, they had little effect; the faith in the power of government was still strong in the minds of rulers, and their attention was distracted by other interests. When rulers had crushed the resistance of their subjects, and established their absolute authority, they had a surplus of power which they were inclined to apply abroad. The period from the sixteenth to the eighteenth centuries is filled with strife between the European states, each attempting to get possession of some of the territory and power of a rival. The states of Europe were still young, with all the vigor and all the inexperience of youth, and not until they had tried conclusions with each other were they willing to settle down as they have done in the nineteenth century. It was said above that internal reform was the best object of government expenditure "from the modern standpoint." Kings and peoples were not modern, and to a king of the time one of the best objects appeared to be a war with another king by which he might get more people under his power.

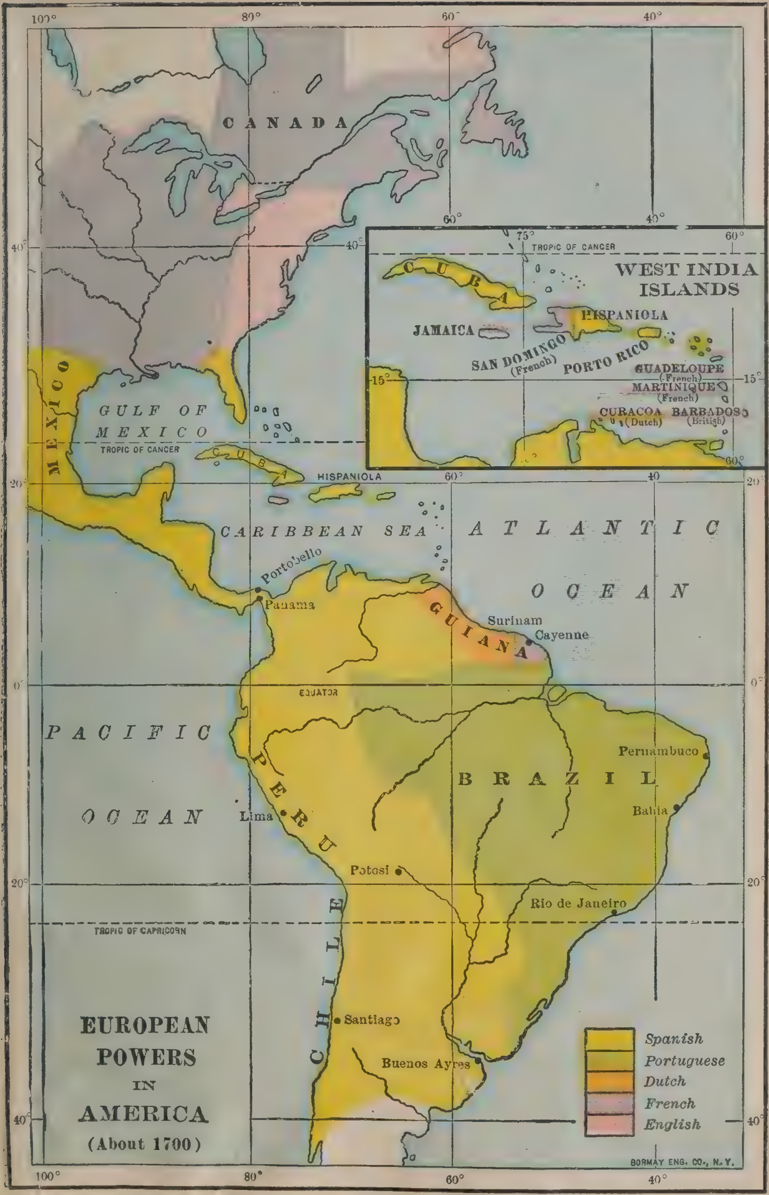
187. Wars occasioned by religious and dynastic interests. — In tracing later the commercial histories of the different countries it will be necessary to refer occasionally to these wars, but it will conduce to clearness if we stop a moment here to examine their causes and character. Some of the wars were religious, growing out of the Protestant revolution. The states of the South remained Catholic, and those of the North became Protestant with comparatively little opposition, but in the center, in France and Germany especially, where neither side had at first a clear supremacy, the Protestant movement led to disastrous civil wars.

Another series of wars may be called dynastic, as they grew out of the ambitions of rulers to extend their power in Europe at the expense of other ruling families. In the sixteenth century the chief contestants were Spain and France. Spain dropped from the first rank, and France and Austria continued the struggle for supremacy through the seventeenth and eighteenth centuries. The dynastic wars seem to the student of the history of commerce as unfortunate as those that came from religious differences. They diverted men and resources from production to destruction; they checked at the same time commercial development and the reform of government.

188. Wars occasioned by commercial interests; military aspect of commerce in this period. — Still another class of wars can be distinguished in which the religious or dynastic motive might enter to some extent, but in which the commercial motive was predominant. The reader should be cautioned against an extravagant idea of the power of government to extend commerce. At the present time this power seems very slight indeed. It was, however, far greater in the period under consideration. References in preceding sections to the prevalence of piracy and to the warlike attitude of merchants of different nations toward each other have suggested the military character of commerce, inviting the armed protection of the state. "One fact stands out clearly," says a recent authority on the history of India, "No European nation has won the supremacy of the East which did not make it a national concern." The prize in distant commerce went not to the best producers and merchants, but to the group of the best fighters; not size and resources, but ability to organize and willingness to risk resources in conflict, determined the question of success. The little state of Holland made her fortune by an eighty years' war, in which she broke the power of the Portuguese and Spanish in the East. The English were still unready to embark their national resources in distant ventures, but they won their position in continental India in the eighteenth century by military support which the French kings refused their subjects.

189. Wars arising from the conflict of colonial interests in the New World. — Between 1600 and 1815 was a constant succession of wars, arising from the fact that five European powers had colonies in the New World which they were seeking to maintain or to extend. Holland and Portugal lacked the territorial basis to maintain their struggle when larger states armed for the conflict; France and Spain found their best energies absorbed by dynastic interests in Europe which tied their hands abroad; England emerged victorious from the conflict and found herself repaid, by a position of commercial supremacy, for the expense to which she had been put. Out of the one hundred and twenty-six years between 1688 and 1815 she had spent more than half, sixty-four, in wars ranging from seven to twelve years in length.

190. Political importance of commerce in this period, connected with the desire of governments for ready money. — Commercial expansion in this period depended, as said above, on the political power of the home country. Did not, on the other hand, the political power of the state depend on commerce? A statesman of the time would have answered this question in the affirmative, and with an emphasis which would seem strange now. We think nowadays that the resources of a state depend upon the prosperity of the people, no matter whether this prosperity comes from agriculture or from manu-



EUROPEAN POWERS IN AMERICA

(About 1700)

factures, from internal trade or from foreign trade. Statesmen, however, of the period under discussion, set a peculiarly high value on foreign commerce, and regarded it as a more important branch of industry than any other.

The chief reason for this view lay in the fact that most of the European states produced little or none of the precious metals, and could get them only by trade with a neighbor or with a distant country. Now money is "the sinews of war," and when states were constantly at war with each other, a good supply of money seemed to the statesman a matter of the first necessity. We regard money nowadays only as a means of procuring other forms of capital by exchange, and do not worry about the money supply so long as capital in other forms is abundant. It may have been the fact, however, that in the early period of the modern state the fiscal and military systems operated more smoothly when the stock of money in the country was abundant.

191. The mercantile system, aiming to increase the stock of ready money in the country. — Whether rulers were justified or not in the anxiety that they showed about the money supply, they made it a cardinal point in their policy to regulate commerce so as to increase, if possible, the stock of the precious metals in the country. They argued that the country would make money if it sold more merchandise to foreigners than it bought of them, for then the foreigners would have to make up the balance in coin or bullion. This was called "a favorable balance of trade," as tending to bring money into the country. On the other hand, if the country became indebted for foreign merchandise to an amount greater than could be offset by the exports, the country would owe a cash balance abroad, and this was an "unfavorable" balance of trade. At the beginning of the period the government tried to effect its object simply by prohibiting the export of bullion (gold and silver); this was the "bullionist" policy.

Prohibitions were found to be ineffective, however, and were a serious hindrance to some branches of commerce, that with the East especially, in which the foreigners demanded considerable supplies of the precious metals. The export of bullion, therefore, was generally permitted, and the government contented itself with a regulation of the commerce in merchandise which, it hoped, would bring more bullion into the country than was carried out.

192. Features of the mercantile system; restriction of imports. — If the student will remember that the main object of the mercantile system, as it was expressed in the commercial policy of the seventeenth and eighteenth centuries, was to increase the credits in a country's foreign trade, and diminish the debits, so as to get a balance in cash, the main features of the policy will be easily intelligible.

In the first place, imports were discouraged. A Spanish mercantilist thought that his country suffered "an infinite wrong" from the importation of fish from abroad, which, by his reckoning, cost the country three million piasters a year; he suggested either that home fisheries should be built up so that the money need not leave the country, or that permission be obtained from the Pope to eat meat on Saturdays, which would diminish the necessity for importation. A typical example of the ideas underlying the policy is furnished by an appeal of the English salt-makers in the seventeenth century, urging that the use of foreign salt in the curing of fish be prohibited on the ground that it was the "wisdom of a kingdom or nation to prevent the importation of any manufacture from abroad which might be a detriment to their own at home, for if the coin of the nation be carried out to pay for foreign manufactures and our own people left unemployed, then in case a war happen with our potent neighbours, the people are incapacitated to pay taxes for the support of the same."

Mercantilism and modern protectionism easily ran together, as is apparent in the quotation, but the spirit animating restrictions was in this period mainly mercantilist, based, that is, on consideration of the flow of precious metals. The methods of tariff regulation, moreover, differed from those of modern protectionism; statesmen did not, in most cases, attempt to scale the duties so as just to balance the advantages of the foreign producer, but resorted to downright prohibition of the wares which they desired to exclude from the home market.

193. Encouragement of exports, manufactures, and shipping. — In the second place, exports were encouraged, for they represented the credit items in a country's trade, and might bring home a balance in cash. Even imports could be tolerated if they led to a more than corresponding increase in exports. The trade with East India was looked on with suspicion for some time because, as said above, it required the export of considerable bullion; but finally it established itself in public esteem, on the ground that a large part of the eastern wares was transshipped in England and exported to other European countries, so that the bullion was recovered from them. Altogether the best kind of imports, however, was held to be the raw materials of manufacture; if these could be worked up in England and exported, the country cleared not only the sum originally due for the imported material, but also the extra charge for the manufacture. Home industries were given various privileges by the government, because they either spared the importation or increased the exportation of the wares which they produced.

Shipping and the fisheries were regarded with special favor, not only because they helped to produce a favorable balance of trade, but also because they were feeders for the national navy, and thus augmented the strength of the country in war.

194. Failure of the mercantile system to affect the distribution of the precious metals. — Such were, in brief, the characteristics of commercial policy in the time of the mercantile system. The word "system" may give a false impression, for though the main ideas of mercantilism were generally accepted during the seventeenth and eighteenth centuries, they were greatly modified in their practical application, and were seldom carried to their logical conclusions. For example, though statesmen professed a desire to stimulate exports, yet export duties were generally retained in this period for the revenue that they returned, and they hurt in some cases, without question, the sale of wares abroad.

After this review of the characteristics of commercial policy the reader will naturally inquire what were its effects. On one point an answer can be given with considerable assurance; the policy had no important effect on the distribution of the precious metals. Gold and silver were brought from America, the chief source of supply, to Spain, and flowed from Spain to the countries where they were needed in business; it seemed as though all the people of the world were in an unconsicous conspiracy to defeat the plans of statesmen for checking or directing the flow. It is noteworthy that Spain, the country which had the best chance apparently to accumulate treasure and which pursued a policy of exaggerated mercantilism, was always complaining of the dearth of gold and silver, while Oriental states, which had never heard of mercantilism, accumulated large stores of bullion. The attempts of European countries to rob other countries of their treasure by legislation present, from one point of view, an absurd spectacle, for they were all applying the same principles in much the same way, action and reaction were equal, and no amount of political straining affected the distribution due to economic demand.

195. Important effects of the mercantile system in other ways. — The commercial policy of the mercantilist period had effects in other directions, if it did miss the mark at which it aimed. It was important, considered merely as a policy of restriction, in checking the exchange of commodities between states. Just as manors and the districts centering around a city had aimed at self-sufficiency in an earlier period, so the states of this period were led by their dislike of imports to attempt the production of everything possible within their borders; and an international organization, in which each state would specialize in the products for which it was best fitted, and would depend on commerce with others for supplying deficiencies, was hindered from developing. The mercantile system furnished a natural basis for the system of national protection, which grew up from it, and which has not entirely outgrown even yet its mercantilist origins. One of the most obvious effects of mercantilist commercial policy can be traced in its influence on the foreign relations of states. It was not, as is often said, the chief cause of the many wars which vexed Europe at this period; their cause lay deeper than any theory of favorable or unfavorable balances of trade. The balance of trade theory did, however, affect the political grouping of countries to a considerable extent, and inclined statesmen to look for friends or foes in the countries with which the balance was favorable or unfavorable. England, for example, made herself the ally of Portugal through a large part of the modern period, because Portugal bought her manufactures, and sold in return wines and other commodities which could not be produced at home; and England kept alive the traditional hostility toward France because the trade with that country showed regularly an unfavorable balance.

196. Colonial policy. — Based on considerations like the preceding, the colonial policy of this period was marked by restrictions entirely opposed to modern ideas of commercial freedom. A government which permitted or encouraged the establishment of colonies in distant lands, considered it a duty to itself to see that other governments or the colonists themselves did not rob it of the rewards of success. The colonial policy of the period has sometimes been pictured as purely one-sided, selfishly sacrificing the colonists to the interests of the people at home. This view leaves out of account not only the generous help given by European governments to their dependencies, but also a great mass of legislation aiming to benefit the colonists by assuring them a market in the home country, and imposing sometimes serious restrictions on the inhabitants there. A government did no more than hold resolutely to the idea that emigrants, wherever they might be, were still citizens of their native state and bound to help maintain its power. The government tried ordinarily to frame its regulations so that mother country and dependency would devote themselves to different lines of production, and so supplement rather than compete with each other. It considered it only natural and proper that the colony should trade mainly or entirely with the mother country. As said above, this was a period of bitter conflict among the European states, and a country's commerce was thought to be one of the mainstays of its military and naval power; it seemed, therefore, to be the plain duty of colonists to contribute by their commerce to the resources on which the independent existence of the whole nation was thought to depend.

QUESTIONS AND TOPICS

The student will do best, probably, to study carefully one of the references to manuals in the bibliography as a means to an understanding of the topics of this chapter.

1. An exercise requiring considerable time, and supposing some acquaintance with narrative history, but promising valuable results, is the following. Select one of the European states: England, France, Spain, the Netherlands. Make a chronological summary of its wars during the period 1500–1789, classifying the wars under one of the heads suggested, and aiming to get the total years spent in each kind of war and at peace. Estimate the gains and losses by war, and so reach a position to judge of the merits of the policy pursued.

2. Sections 181–2 cover, to some extent, the ground of chap. 15. Review that chapter, and, if possible, review the history of some state like France, to appreciate the significance of the political development. [Adams, French nation.]

3. Make a written summary of the hindrances to commerce in France at the end of this period. [Taine, The ancient regime, N. Y., Holt, 1876, $2.50; Edward J. Lowell, The eve of the French Revolution, Boston, Houghton, 1900, $2.]

4. Thomas Mun, an Englishman who lived in the seventeenth century, wrote that the regular means "to encrease our wealth and treasure is by *Forraign Trade*, wherein wee must ever observe this rule; to sell more to strangers yearly than wee consume of theirs in value." State the arguments by which Mun would support this proposition, and determine your own opinion on the question.

5. Make a brief written statement of the difference between mercantilism and protectionism.

6. Define the attitude which the mercantilist would assume toward each of the following trade phenomena: import of raw silk, export of silver plate, export of silk goods, import of knives, import of gold bullion, import of salt fish.

7. Study, in a book on economics, the influences determining the distribution of the precious metals, and show how mercantilism was bound to fail in its object of increasing the money in circulation in a given country. [For a brief and clear discussion see F. A. Walker, Pol. econ., advanced, N. Y., Holt, sects. 176–178.]

8. Discover, in the writings and speeches of American protectionists, evidence of mercantilist views. [See, for example, Roberts, Government revenue, Boston, 1884, or R. W. Thompson, History of protective tariff laws, Chicago, 1888.]

9. Criticism of the old colonial policy. [Adam Smith, Wealth of nations, Book 4, chap. 7, part 2, reprinted in Rand, Ec. hist., chap. 1.]

BIBILOGRAPHY

A bibliography, unfortunately ill suited to the purposes of untrained students, is appended to chap. 22 of Cambridge mod. hist., vol. 3. See also the histories of economics by Cossa and Ingram, under mercantilism.

Of general discussions the student must choose between the chapter noted above, J. N. Figgis, Political thought in the sixteenth century, which is abstruse and theoretical, or Cheyney, Eur. background, chap. 6, Political institutions of Central Europe, 1400–1650, which is concrete and descriptive; neither is satisfactory for our purposes. Probably the most intelligible discussion will be found to be Seeley's ** Expansion of England, especially lecture 4, the old colonial system; and lecture 6, commerce and war. Schmoller, ** The mercantile system, deserves its place as an economic classic, but will be found difficult by beginners. A brief account of mercantilism, by Ingram, will be found in the Encyc. Brit., 9th ed., 19: 354–358.

Among the smaller manuals can be recommended: Cunningham and McArthur, chap. 4; Warner, chap. 9. Thomas Mun, England's treasure by forraign trade, N. Y., Macmillan, 1895, $.75, presents mercantilist views in their typical form, and is an excellent source for somewhat advanced students; chapters may be assigned for discussion and criticism.

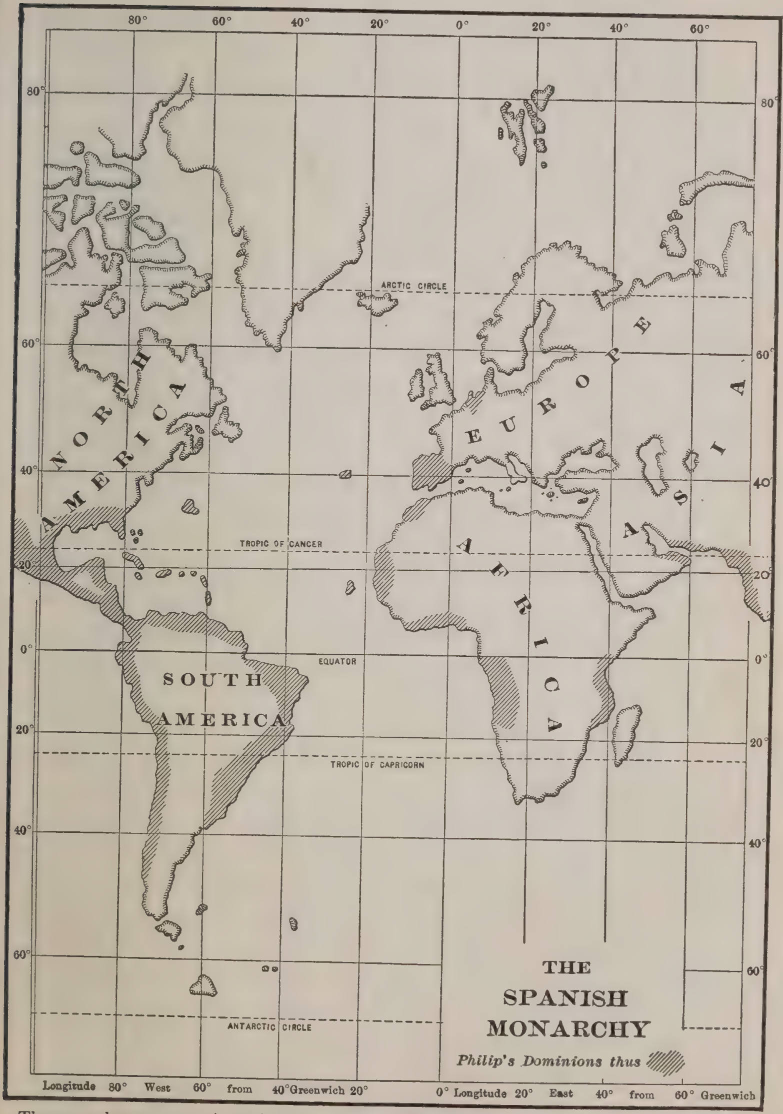
CHAPTER XIX

SPAIN AND PORTUGAL

197. Extent and power of the Spanish monarchy. — Pursuing now the history of modern commerce by studying its development in different countries, we turn first to the states of the Iberian peninsula, whose great possessions outside of Europe seemed to assure their commercial supremacy.

Shortly before the close of the last century of the Middle Ages three events of great significance occurred in Spanish history. One was the union of the crowns of Castile and Aragon, which brought the greater part of the Iberian peninsula under one ruler. The second was the completion of the centuries old war against the Moors, by the conquest of their last stronghold in Granada. The third was the discovery of America by Columbus. The great Spanish king of the sixteenth century, Charles V, was the most powerful sovereign in the world. He governed at home with undisputed absolutism; he was ruler by one title or another of some of the richest European countries outside of Spain (especially the Netherlands); and he enjoyed in his own right the sovereignty not only over the greater part of America, but over Asiatic and African possessions as well.

198. Rapid development of Spanish industry and commerce. — The rise to greatness of the Spanish kings was paralleled by the development of the Spanish industrial organization. Spain had throughout the Middle Ages been rich only in her raw materials; she had exported wool, iron, and wine, and had imported all her manufactures, largely in foreign ships. The long wars against the Moors had turned people from the industrial arts, so that manufactures were primitive except in a



The map shows approximately the extent of the Spanish possessions under Philip II, (1556–1598).

few cities like Barcelona. The most advanced classes in manufactures and trade were not the native Christians but Moors or Jews. A decided advance can be noted under Ferdinand and Isabella, but the movement did not gain full headway till the sixteenth century. Then, it is said, the laborers employed in the textile industries of Toledo rose from 10,000 to 50,000 in about twenty-five years, and still merchants could not supply the demand and had orders for five or even ten years ahead. The industries based on wool, it is said, grew till they supported nearly a third of the population; Spain began to import raw silk and export the finished product, a reversal of previous conditions; great factories were established to make soap and other wares; and the amount of business transacted in Spain made the fairs of Medina del Campo one of the important clearing houses of Europe. Over 100 ships measuring from 300 to 500 tons left Spain yearly for the colonies, and at least as many cleared for European ports; 50 ships or more, it is said, often left the harbor of Santa Maria together, carrying away the salt that was manufactured there.

199. Economic decline in the following period. — Astonishing as is this rapid economic development, it is less striking than the economic decline that followed. Lack of space forbids the discussion in detail of the complex causes which brought about, first, an actual decline of productive power, and then a condition so nearly stationary that Spain was passed by nearly all the other states of western Europe. One important factor, the colonial system of the Spanish kings, will be reserved for discussion later as a separate topic. In this place we shall take up some of the significant facts showing the decline, and suggest some influences that make it intelligible.

The most serious symptom of decadence was an actual decrease of population. In 1723 the total population of Spain was under six million, three million less than the figures show for 1594, when the decline had probably already begun. This decrease is the more significant in that it affected largely the urban groups whose numbers reflect the prosperity or reverses of industry and trade; large cities lost half or even three quarters of their population in half a century. Before the middle of the seventeenth century the wool manufacture consisted only of a few unimportant factories of coarse materials; the silk tax of Granada brought in less than a quarter of what it had yielded under Charles V; and Spain had to rely on other countries to furnish the manufactured wares for export to her colonies. The decline affected not only the quantity of the population, but, to all appearances, its quality as well; beggary and vagrancy became a national curse.

200. Causes of decline; faulty political organization. — The decline in population cannot be explained by emigrations to America, for the drain from that source was small, as will be shown later. Executions by the Inquisition, numerous as they were, could not alone have checked the population. More serious was the expulsion, under ecclesiastical influences, of the Moriscoes of the South, numbering perhaps a million. These people of Moorish blood, the leaders in the agriculture and industry of Spain, in 1609 followed into exile the Jews who had been the leaders in trade; the native Spanish were unfit to fill the gaps thus made in the industrial ranks.

Deeper-lying causes were at work, however. The damage from any single event could have been repaired if there had been wholesome vigor in the Spanish political organization, as there was and as there is still among the Spaniards as a people. It was the fortune of Spain, at this critical period of her history, to have the control of affairs vested in the hands of rulers who were negligent of her condition, by the distraction of their interests or by natural incompetence, and who wasted her resources. The framework of government offered no chance for good councils to reach the monarch's ears. Men of business sense were excluded from office even in the towns, so far as possible, and were a rarity in the national parliament; power lay in the hands of lay and ecclesiastical lords who had inherited feudal ideas, the reverse of business-like, from the earlier period of the crusade against the Moors, and who had no understanding of the measures needed for industrial development. There can be little doubt that the prime evil from which Spain suffered was (as it still is) bad government.

201. The burden of taxes. — The chief political abuse appeared in the form of taxes so burdensome in their amount and in the method of collection that industry was stifled. Taxes increased so rapidly in the sixteenth century that in 1594 it was asserted that they amounted to 30 per cent on a man's property, and that farmers could not exist no matter how small a rent they paid; they left Spain or went to prison. The "alcabala," a tax supposed to be 10 per cent on a ware every time it was bought and sold, was raised until it absorbed most of the profits of trade and was a leading factor in the decline of industry. A Spanish author of the eighteenth century (Ulloa) shows that a man engaged in the manufacture of a certain stuff would have had to pay in taxes actually more than he earned; "hence it follows that he would have gained more by making nothing, and in Spain it is profitable not to work." Some industries, more fortunate, paid 60 per cent or 40 per cent of the value of the goods as a tax to the government.

202. Customs duties, on the frontier and inside the country. — The same ruinous excesses marked the policy in customs duties. The government established rates which were for the time enormously high, or absolute prohibitions with the death penalty for infraction. Commerce would have ceased almost altogether if it had not been for the absolute need of foreign wares in Spain after the destruction of home manufactures. The wares were procured partly by smugglers through the corruption of the customs guards, partly by the connivance of the government, which allowed foreigners such favors in measurement and valuation that often not over a quarter of the nominal duty was paid. This allowed wares to enter, but it killed the remnants of active Spanish commerce with Europe, for the favors granted to foreigners were refused to natives. Other measures almost as monstrous were attempted, and failed only because the government lacked power to enforce them. Spanish shipping declined until it practically ceased to exist outside the protected colonial traffic.

Finally, to complete this picture of the difficulties under which commerce labored in Spain, duties existed not only on the frontiers but in the interior of the country, hindering the free passage of goods and the development of resources. Spanish kings made attempts to abolish the internal customs frontiers, which failed through the opposition of interested persons and the royal need for money. It was not until 1717 that the internal duties were done away with, and even then the remedy was insufficient, and Andalusia kept its internal tariff barriers.

203. Examples of bad policy; the Mesta. — An excellent example of the evils of the government's economic policy is furnished by the history of the Mesta, an association of stock raisers largely devoted to the production of merino wool. The flocks grazed in summer on the highlands of Leon, and descended in winter to Estremadura. The Mesta got such privileges that it killed the agriculture within its reach. Where the sheep had once fed the land could never be alienated for another purpose; no one could bid against the Mesta for the lease of pastures; proprietors along the route of the sheep must sit passive and see the crops destroyed by them. Estremadura, once one of the richest provinces of Spain, became one of the poorest, and parts of it now are nearly desert. The policy of favoring one interest, by sacrificing to it other interests more important, was characteristic of the diseased political condition of Spain; and the wasting of national resources shown in the case of the Mesta was but one of many examples of neglect. The canals and aqueducts of the irrigation system, on which the Moors had lavished their care, were allowed to deteriorate and go out of use; and the forests were cut down to the permanent detriment of the soil and water supply.

204. Failure to develop colonial trade. — In the foregoing sketch we find sufficient explanation of the decline of the domestic industry and commerce of Spain; we have still left to consider the question why the evils of the home system were not repaired by the chances for commercial development which the discovery of America and of the sea route to eastern possessions opened. Before the attention of Spanish rulers was absorbed by the attempt to suppress the Protestant movement in Europe and to subject the Netherlands, the crown had won an immense area outside of Europe; even to-day the extent of the Spanish possessions at this period is attested by the hold which the Spanish language still has on the world. Of all the European countries Spain was the one which appeared in the sixteenth century to have the best chance to build up a great commercial empire based on world-wide possessions. Why was not this chance accepted?

205. Spanish colonial policy. Taxes. — It was a misfortune for the Spaniards that they quickly discovered precious metals in America, and in seeking to increase their supply were diverted from a more substantial basis of prosperity. But the final blame for failure lies again not with the people nor with the nature of the colonies, but with the government. The explanation is to be sought in the colonial policy of the Spanish kings. At first the trade to America was comparatively unrestricted. Before, however, merchants could establish the trade relations which would have enabled them to develop the resources both of Spain and the transmarine possessions, the government laid its heavy hand on the trade and held it down so tightly that it never acquired vigor. Heavy taxes were levied on trade, and, as in the case of taxes at home, these often were framed in such a short-sighted way that they brought far more loss to commerce than gain to the treasury. The "palmeo," for instance, was an export duty levied in the eighteenth century on wares merely according to their bulk, without regard to their value; its effect was to encourage the export of foreign manufactures, which had great value in a small bulk so that they could afford to pay the duty, while the coarser Spanish exports were taxed out of existence.

206. Restriction of trade to appointed fleets. — Ships could not sail to America as might suit the convenience of merchants, but had to sail from a given port (Seville or Cadiz), at a given time, to a given port in America (Porto Bello near the modern Colon, or Vera Cruz). The government by this restriction made it easier to protect the ships at sea, and to collect taxes from their cargoes, but it bound the arms of merchants so fast with its official red tape that they were weak and helpless. In theory two fleets left Spain each year, one for Central America and one for South America; in fact there were years together, especially in the eighteenth century, when fleets did not sail, and when the colonial possessions might have been entirely non-existent so far as regarded benefit to the mother-country.

207. Restriction of the market by the discouragement of emigration. — On arrival in America a cargo was sold sometimes for a tremendous advance over cost. Sometimes, however, and more and more frequently as time went on, a fleet would find on arrival that there was no market for its goods, and they would be sacrificed or brought back to Spain unsold. A special reason for this will appear later, when we refer to the growth of smuggling. One general cause, however, for the weakness of Spanish colonial commerce must be noticed in this place. In contrast to the English, who stimulated emigration and so built up a market for their wares in the colonies, the Spanish kings kept emigration under a system of regulation which was almost inconceivably strict. Colonists were discouraged from settling in the New World not only by the difficulty of getting permission to go out, but also by the poor chances for making a living when they arrived. They were strictly forbidden to engage in any industry which could threaten to compete with a Spanish industry; they were tied down to residence in some particular province; and they were prevented from developing the resources about them by restrictions which applied not only to trade with the mother-country but also to intercolonial trade. Trade with the

Philippines, for instance, was closely restricted or even prohibited. Districts in the southern part of South America were subject to similar burdensome restrictions. A settler on the La Plata might have to get his European wares by a trip across the Continent to Lima, then up the west coast, and across the isthmus to Porto Bello. When the privilege of receiving two ships a year was granted to Buenos Ayres a customs frontier was established in the interior to prevent goods from reaching Peru by this route.

208. Supply of the market by smugglers. — Spanish colonists increased but slowly, therefore, in numbers and riches, and furnished a poor market for Spanish exports. The Indians were even worse customers. Natives who went barefoot and had no beards were forced, it is said, to buy razors and silk stockings at exorbitant prices, but of course they had no natural desire for those or other European wares, and took only an inconsiderable amount. As the home manufactures declined in vigor, exports to the colonies came to consist almost entirely of the wares from other European countries, and even these were obtained mainly through smugglers. The government could maintain its regulations against Spaniards, but not against foreigners, who absorbed the most profitable parts of the trade, and spoiled the market for merchants who obeyed the restrictions. The English and Dutch islands became the stations for an illicit trade which flourished as the regular trade declined. After 1713 England had the right, by treaty, to the monopoly of the African slave trade with the Spanish possessions, and was privileged to send out nearly five thousand negroes a year. The English had moreover the right to send out one trading ship of 500 tons; they secretly enlarged the capacity of the ship and used accompanying transports to carry still more cargo.

209. Wares of the colonial trade. — Of the products which Spanish America furnished to commerce silver continued the most important during the colonial period; the list of a ship's cargo begins always with an enumeration of the "plate," in bullion and coin, of which but a small part was gold. A fleet which left America in 1582 comprised 37 ships, "and in every one of them there was as good as thirty pipes of silver one with another, besides great store of gold, cochinilla, sugars, hides, and Cana Fistula (arrow-root?) with other apothecary drugs." Descriptions of cargoes in the eighteenth century are substantially similar; among additional wares enumerated we find indigo, cocoa, vanilla, sarsaparilla, "Jesuit's bark," (quinine) "Paraguay tea" (*maté*), etc. The chief export from the La Plata region was hides, of which two ships brought nearly 40,000 in 1723. Most agricultural products were too bulky to pay for transportation.

The Spanish exported to the colonies assorted cargoes; one of 1625 included "Wines, Figs, Raisins, Olives, Oyle, Cloth, Cursies (kerseys, light woolens named from an English town), Linnen, Iron and Quicksilver for the mines."

210. Reform of the colonial system about 1750. — In the eighteenth century the old Spanish colonial system went to pieces. The government recognized at last that it could not execute the laws which it had made, and that the system which was meant to form the basis of a great empire resulted only in stifling Spanish commerce and in encouraging foreigners to great illegal gains. Foreigners were still excluded in theory; the importance of the change lay in the opening of the trade to the Spanish who had before been excluded by restrictions and taxes. Spanish merchants were allowed first to send out ships independent of the fleets, and then in 1748 the fleets were given up altogether. The prohibition on commerce between the colonies was removed, and many new ports in America were opened to the European trade. An indication of the results that might follow such a change in policy had been furnished by the experience of Havana. When this city was captured by the English in 1762 and thrown open to English trade, 727 merchant vessels entered the harbor in less than a year. Even though the prohibition of trade with foreigners was still retained, the effect of the reform in policy was nothing less than magical. In ten years the trade and the customs duties increased about eightfold.

The reform came too late to benefit the Spanish industrial system. The colonies were destined to exercise their new strength in breaking their old bonds; while the home industries had decayed so far that a revival was impossible in competition with industries of more progressive nations. We leave Spain in the eighteenth century as we found her in the fifteenth century, serving the other countries of Europe by the production of raw materials, and dependent on them for her manufactured goods. Running through the list of the principal Spanish exports in the eighteenth century we find among them some that had undergone the first stage of manufacture, like wine, oil, soap, soda, and iron; but most were simple raw materials such as wool, salt, fruits, and nuts.

211. Portugal; promise of commercial greatness in the sixteenth century. — The little country of Portugal, numbering perhaps a million inhabitants, built up in the sixteenth century a commercial empire worthy to rank with that of Spain, and exceeding in importance that which any of the more northern states in Europe had yet established. I have already recounted the achievements of the Portuguese in maritime explorations. The part which they played in these expeditions prepared them for the oceanic commerce which developed after the discovery of America and of the sea route to India. While other nations stronger than Portugal in resources and industrial development were still unready to put forth their strength in distant commerce, Portugal shared with Spain the extra-European world, and gained for herself the richest part, the East. Da Gama returned to Lisbon in 1499 with a cargo which repaid sixty times the cost of the expedition. This was the beginning of a series of voyages devoted especially to the importation of pepper and other spices, which could be bought so cheaply in the East that they returned immense profits in Europe. Even the gold and diamonds which came later from Brazil were less valuable to Portugal than the monopoly she now possessed in the spices, drugs, dyes, and manufactures, which formerly had been obtained only by the expensive land route.

212. Failure of Portugal to maintain her position. — Portugal was favored not only by conditions in Europe, which gave her the start on other states, but also by conditions in Asia which enabled her able agents to build up, through naval power, a commercial overlordship which brooked no competitors, either Asiatic or European.

Portugal was, however, destined to play a great part in European commerce for only one century. We cannot, as in the case of Spain, say that a mistaken policy was the cause of her decline, for although the Portuguese commercial policy was very similar to the Spanish and would have shown the same weaknesses if it had been allowed to develop, more important forces were at work to drive Portugal from the rank which fortune had conferred upon her.

213. Weakness in resources; bad effects of Spanish rule, 1580–1640. — Portugal was not only small but industrially undeveloped, and from the very first depended on other countries for the wares which she exported to the East. Her explorations and her distant commerce were due to the energy of the dynasty rather than that of the people, and it was the misfortune of the country, in the critical period 1580 to 1640, to fall under the rule of Spanish kings whose influence on her commercial interests was entirely for the bad. Of the 806 vessels which Portugal sent to India, 1497–1612, only 186 sailed after 1580, and not only the number but the quality declined in a period which should have been marked by growth. Countries like England and Holland, which were far stronger economically than Portugal, refused longer to allow her the profits of trade while they did the work of production, and the English broke the power of the Portuguese in India, while the Dutch drove them from the eastern islands.

214. Failure of Portugal to recover her position by commerce with Brazil. — After the recovery of her independence in 1640, Portugal could look only to her American possession, Brazil, for the means of developing her commerce. The Dutch were expelled from that possession, and the discovery of gold there stimulated the growth of trade. Comparing the latter part of the eighteenth century with the earlier part of the seventeenth, the commerce between Portugal and Brazil is said to have increased twenty-fold. In place of a dozen ships a hundred sailed every year for America, returning with sugar, tobacco, hides, brazil-wood, gold, and diamonds.

The profits of this commerce, however, went for the most part to foreigners. Conditions at home had gone from bad to worse. The slight advance which the country had achieved in agriculture and manufactures before the discoveries had been lost by the attraction of all energetic spirits into commerce and navigation. African slaves took the place of free men in the fields. Portugal staked everything in the sixteenth century on the chance of commercial greatness, and when she lost, lost all.

215. Dependence of Portugal on England. — "In 1754 Portugal scarcely produced anything towards her own support. Two thirds of her physical necessities were supplied by England. England had become mistress of the entire commerce of Portugal, and all the trade of the country was carried on by her agents. The English came to Lisbon to monopolize even the commerce of Brazil. The entire cargo of the vessels that were sent thither, and consequently the riches that were returned in exchange, belonged to them. Nothing was Portuguese but the name." Reviewing the list of exports to Brazil we find, in fact, that they were wares which Portugal was herself unable to produce, and which were supplied by England: woolens, hats, stockings, gloves, metals, linens, etc. England had taken advantage of her economic and political weakness to make a mere dependency of her, imposing treaty obligations which gave the English producers every advantage in her markets, and which reduced her to a state of pitiable subjection.

The great Portuguese statesman, Pombal, who made the statements quoted at the beginning of this section, attempted to reanimate industry, and succeeded to a slight extent in throwing off the English supremacy. At the close of the eighteenth century, however, Portugal had still only one strong national industry, the production of wine (port, so called from its place of shipment, Oporto) for the dinner tables of the English upper classes; and in spite of the efforts of Portuguese statesmen even the wine trade was controlled by English merchants.

QUESTIONS AND TOPICS

1. What are the chief exports of Spain at present? [Commercial geography or Statesman's Year-Book.]

2. Write a report on beggary and vagrancy in Spain after 1500. [Moses, in Journal Pol. Econ.; Prescott or Motley.]

3. Write a report on the results (especially the economic results) of one of the following:

(*a*) The Inquisition.
(*b*) Expulsion of the Jews.
(*c*) Expulsion of the Moriscoes.
[See the various books by H. C. Lea.]

4. Verify the statements concerning the character of Spanish government in sect. 200. [Prescott or Motley.]

5. With reference to sect. 201, what is regarded as a reasonable rate of taxation in the U. S. now? [See a manual of Civics, that by John Fiske, for instance.]

6. Write a report on the decline of Spain in productive power as the result of bad government. [Moses in Jour. Pol. Econ., Jones in No. Amer. Review.]

7. In what parts of the world is Spanish still the common language?

8. Write a report on the beginnings of Spanish colonial policy. [Bourne, chap. 14.]

9. Write a report on the Spanish system of fleets. [Bourne, chap. 19; Roscher.]

10. Was there any good reason for the sailing of ships in fleets? [See in Oxley the chapter describing the exploits of Drake and other freebooters.]

11. Write a report on the great Spanish fairs in America. [Bourne, pp 291-293; Roscher.]

12. Spanish emigration to America. [Bourne, chap. 16; Moses, Spanish rule.]

13. Restrictions on intercolonial trade. [Bourne, p. 289 ff.; Moses; Roscher.]

14. History of smuggling in the Spanish colonies. [Bourne, chap. 19; Roscher; manuals of English history in connection with the treaty of 1713 and the "War of Jenkins' Ear," 1739.]

15. Write a brief report on the characteristics and history as a ware of commerce of one of the following: cochineal, cocoa, vanilla, cinchona, or quinine. [Encyc.; Willis, Practical flora; manuals and encyclopedias of commerce.]

16. Assuming that most of the manufactures in the list of exports from Spain were furnished by other countries, what do you infer as to the economic hold of Spain on her colonies — was trade with the mother-country a necessity to the dependencies?

17. Write a report on the reform of the colonial system and the light that the results throw on early policy. [Bourne, p. 295 ff.; Roscher.]

18. History of the Portuguese in the East in the sixteenth century. [Stephens, chap. 9; W. W. Hunter, History of British India, vol. 1.]

19. Effects of the sixty years of Spanish rule. [Stephens, chap. 13.]

20. History of the Portuguese in Brazil. [Stephens, chap. 10; Keller in Yale Review, Feb., 1906.]

BIBLIOGRAPHY

Reference may be made at this point to C. K. Adams, Manual of historical literature, third ed., N. Y., Harper [1888], as a bibliographical aid which is far from answering modern requirements, but which may still be of use to a teacher in handling such collections of books as may be found in a city library. A bibliography of Spanish history in the sixteenth century is appended to Cambridge Mod. Hist., vol. 1, chap. 11, and is continued in later volumes. A bibliography is given also in Martin A. S. Hume, The Spanish people, N. Y., 1901, a book which covers Spanish history from the earliest to present times, and which pays some attention to social history.

Of general books on Spanish history, Prescott, Motley, etc., may still be put to good use. Attention should, however, be especially directed to the writings of * H. C. Lea, which contain valuable social and economic material. A useful paper by Bernard Moses, ** The economic condition of Spain in the sixteenth century, has been published both in the Journal of Polit. Econ., Chicago, 1892–3, vol. 1, pp. 513–534, and in Report of Amer. Hist. Assoc., 1893, Washington, 1894, pp. 123–133. The Story of Spain in the Story of the Nations series is of no value for our purposes.

On the colonial history and policy of Spain the student has several excellent books: E. G. Bourne, ** Spain in America (with bibliography);

Häbler, ** The colonial kingdom of Spain, in H. Helmolt, Hist. of the World, vol. 1, pp. 386–422, N. Y., Dodd, Mead & Co., 1902; Roscher, ** The Spanish colonial system, N. Y., Holt, 1904, Moses, * The establishment of Spanish rule in America, N. Y., Putnam, 1898.

Two scholarly works in the series of Harvard Economic Studies deserve the attention of the serious student: Clarence H. Haring, Trade and navigation between Spain and the Indies in the time of the Hapsburgs, vol. 19, 1918, and Julius Klein, The Mesta, a study in Spanish economic history, 1273–1836, vol. 21, 1920.

The best single reference on Portugal is H. Morse Stephens, * Portugal. For the Portuguese colonial ventures see Keller, ** Colonization, chap. 3, The Portuguese in the East, chap. 4, The Portuguese in Brazil.

CHAPTER XX

THE NETHERLANDS

216. Establishment of the United Netherlands. — With the decline of Spain and Portugal the supremacy in European commerce passed definitely to the countries of the North. The country which first took the lead, and which we shall consider next, was the Netherlands, or as it is often called from its main province, Holland. The Netherlands, which has now an area but one fourth of that of New York State, was a part of the possessions which by marriage and politics had come under the rule of the Spanish crown. Its natural resources are slight, and in the early part of the sixteenth century it was far behind the adjoining Spanish territory now known as Belgium, which contained the developed manufactures of Flanders and the great port of Antwerp. The Dutch were strong, however, in the individual capacities of the people, and in spite of the disparity of the contest were able to win their independence from Spain in the Revolution which came in the last part of the sixteenth century.

A variety of causes combined to urge the Dutch to revolt. They suffered under Spanish rulers political oppression, and religious persecution designed to crush the Protestant movement which they had embraced. They suffered also, however, under the commercial restrictions of Spanish policy. These they could bear so long as they found an outlet for their growing commerce by trade with the East through Portugal, but the union of the crowns of Spain and Portugal in 1580 closed even this outlet, and forced them to fight for the means of existence and of growth.

217. Rise of Dutch commerce. — The Dutch were forced to the sea by the difficulties of life at home, and had made good progress in commerce with their European neighbors before their revolt. They had become used, also, to distant voyages by explorations designed to open up new routes for trade. In the vain attempt to establish a northeast route to India by the Arctic ocean they showed especial energy; and the names Tasmania, Van Diemen's Land, New Zealand, attest their boldness later in exploring the southern hemisphere. When, therefore, they had achieved their independence and needed no longer to fear the threats of Spanish and Portuguese rulers, they made rapid strides in oceanic commerce. Before 1602 sixty-five ships had made the return voyage to India, and throughout the seventeenth century an active commerce was maintained with both Asia and America.

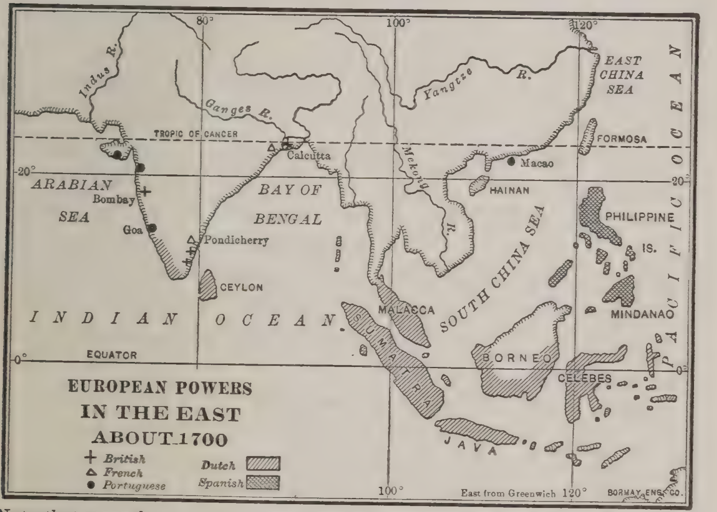
218. Dutch commercial policy. — We are tempted, by the position that the Netherlands took against Spanish oppression, to ascribe to the Dutch a greater love of liberty than they actually had. The government which they established for themselves was marked by serious faults of oppression and corruption, and their commercial policy was nearly as narrow as that of Spain. The exclusion of foreigners from trade with their distant dependencies was only natural in this period of commerce; even the Dutch, however, were not free to trade as they pleased. The colonial commerce was absorbed by great companies, which were granted a monopoly of trade in certain areas, and which regulated this trade with extreme minuteness. The companies had a complicated organization which prevented efficiency and encouraged the improper use of personal and political influence.

219. The Dutch West India Company. — The Dutch West India Company, founded in 1621, controlled the trade west of the Cape of Good Hope, comprising commerce with the west coast of Africa, and the east coast of the Americas. This company was an extraordinary specimen of its kind. It paid high dividends for a time, but its earnings were necessarily precarious for it made them not from the ordinary operations of commerce and colonization, but from armed attacks on the Spanish silver fleets. It was really a corporation of privateers. The character of the company can be estimated from the fact that it actually opposed peace between the Netherlands and Spain; in its remonstrance of 1633 it said that the services desired of it "for the welfare of our Fatherland and the destruction of our hereditary enemy could not be accomplished by the trifling trade with the Indians, or the tardy cultivation of uninhabited regions, but in reality, by acts of hostility against the ships and property of the King of Spain and his subjects."

The Dutch soon lost their possessions in Brazil and New Netherland (New York), and the original company was dissolved; the possessions which the Dutch retained on the coast of Guinea and in South America were unimportant. Small islands in the Gulf of Mexico, which in themselves produced little of value, served as stations for the Dutch carrying trade, which continued to be considerable.

220. The East India Company. — The East India Company, founded in 1602, which secured from the Dutch government the monopoly of trade and rule from the Cape of Good Hope to the Straits of Magellan, enjoyed a longer existence. It established trading stations on various points of the Asiatic coast and in South Africa, but found the mainstay of its power in the rich islands of the Malay archipelago, especially in the small group of spice islands and in Java. Here it broke the power of the Portuguese, and gained for itself a partial or total monopoly of some of the products, which were among the most highly prized luxuries of Europe.

In 1677 a fleet consisting of one small vessel and six large ships, of which each carried a crew of about 100 sailors and 25 marines, brought a cargo booked at nearly two million gulden (or several million dollars). The cargo included immense quantities of pepper, nutmegs, mace, and cinnamon; raw silk, and silk and cotton textiles from Persia and India; indigo, borax, saltpeter, shellac, fine woods, etc. Neither tea nor coffee appears in this list, but in the next century, when the Dutch had developed their commerce with eastern Asia and had stimulated the cultivation of new products in Java, these and other wares became of the first importance. The cargo of a fleet of 1739 included the following wares, in the order of their value; tea, coffee, pepper, sugar, mace, nutmeg, camphor, indigo, cloves, etc.



Note that several powers had established themselves on the coast of India; the British did not win the position of unquestioned superiority until toward 1800.

221. Leading position of the Dutch in European commerce. — Historians often speak of this distant commerce of the Dutch as forming the basis for their great prosperity in the seventeenth century. Figures are lacking which would enable us to determine the exact proportion of this distant trade to the total, but the importance of this new branch of commerce was probably exaggerated by reason of the strong appeal it made to the imagination of men of the time. Certainly the Dutch were not dependent on the Indian trade for the position they took among commercial nations then. In the seventeenth century more than half of the Dutch ships sailed for some port on the North or Baltic seas. In 1640, 1,600 ships out of a total of 3,450 passing through the Sound to the Baltic were Dutch; and at this time a Dutch official declared that grass would grow in the Amsterdam exchange and ships would be sold for firewood if the Baltic trade were not kept free.

Thirty to forty Dutch ships went every year to Archangel, then the chief port of Russia, and carried the products in which the Hansa had formerly dealt to the Netherlands and to the west coasts of France and Spain; Dutch ships almost monopolized the trade between Spain and the northern countries after 1648, exporting 15,000 to 16,000 bales of wool a year from that country while French and English together exported but 3,000. Dutch exports reached a figure in the seventeenth century which was not attained by the English until 1740. Even the Dutch fisheries, which employed over 2,000 boats, were said to be more valuable than the manufactures of France and England combined. A Dutch contemporary asserts, indeed, that as many persons were occupied in the fisheries as in commerce.

222. Growth of business activity. — The prosperity of Dutch foreign commerce was reflected in business activity at home. The Netherlands rapidly outstripped the southern low countries (now Belgium), which suffered cruel repression under Spanish rule; and the great commerce of Antwerp passed to Amsterdam. Speculation and banking developed in their various forms and the Netherlands became the money center of Europe. Scholars find in the Dutch business life of this period many features which are strikingly modern; speculation in stocks, commercial crises, pools, and "trusts." Manufactures felt the impulse of progress, and broke the bonds of the old gild system for more modern forms of enterprise. Large establishments grew up; new industries were introduced (hats, silk, tanning, etc.); the Huguenot refugees expelled from France were granted a welcome for which they gave a rich return.

223. Commercial decline of the Netherlands. — When and why did the Netherlands lose the commanding position in

European commerce? What country took the lead away from it? Those are questions which the student of the history of commerce must face, and in the following paragraphs the answers will be given.

There is no doubt about the last point; Netherland lost the leadership to England. The time when this change occurred can be stated with almost equal brevity; it was during the one hundred years between 1650, roughly the date when Cromwell gathered up the scattered forces of England to use them for her commercial advancement, and 1750, when the commercial supremacy of England could no longer be questioned.

The reasons for the change are as usual the hardest as they are certainly the most valuable topics to be studied. One reason can be stated here as a fact, to be proved afterwards in detail, that England was growing stronger. On the Dutch side, was the Netherlands growing weaker, or did it simply fail to keep pace with the English advance?

224. Reasons for decline. — So far as the facts are known Dutch commerce increased in amount till about 1730 and maintained about the same figures afterwards; but world commerce was growing so rapidly that relatively the Netherlands fell behind. The very size of the Netherlands told against the country in a political contest with other powers. It implied, too, a lack of native resources to support commerce when the hold of the Dutch on foreign trade was weakening. Furthermore, the Netherlands was like the Hanseatic League in that it lacked a strong central power and policy, and gave great independence to the separate units of which it was composed. The important units, in the economic aspect, were cities, which were able to carry on a small-scale commerce very successfully, but which could not unite to bring their best people to the front in a big-scale organization which could compete with that of other countries. The Dutch did not pull together to make the most of what they had, and the inefficiency and corruption which had always characterized the local governments grew worse with time. Rule by family rings brought with it favoritism and inordinately high taxes, under which industries labored and dwindled. Manufactures which had formerly flourished now declined. Weak at home, and, in comparison with other European states of the eighteenth century, weak abroad, the Netherlands fell from the first rank of commercial states, retaining in its colonies and in its developed banking system only reminders of its former greatness.

225. Character of the Dutch East India Company. — In the eighteenth century, when the Netherlands was struggling to maintain its commercial position, it was hindered rather than helped by the East India Company. The company seemed to have the chance to make stupendous profits, for it sold its wares for very high prices in Europe, and it paid for them in Asia very little or even nothing. It used its power to force the natives to supply it with some of these wares at nominal prices or absolutely gratis. The very fact, however, that the company could get its wares in this way, as a state would get them by taxation, suggests that the company had expenses like those of a state and unlike those of an ordinary commercial corporation. This was the fact; the company had to support the civil and military establishment of a regular government. This government shared, to the full, the political evils of the time; both at home and in the East it was corrupt and inefficient. It was strong enough to hold its own against the Portuguese, or against the English when they began their expansion in the East; but it was no match for the English when their strength developed in the eighteenth century.

226. Decline of the Company after 1700. — After 1700 the Dutch East India Company fell behind rapidly. It enjoyed such a high reputation, and kept its condition secret so successfully, that its credit was unimpaired, and it continued to pay dividends by borrowing money. For nearly two hundred years it declared dividends at rates ranging from 12½ per cent to 20, 40, or even 50 per cent; the average dividend from 1602 to 1796 was over 18 per cent. The crash was bound to come finally; the company paid its last dividend in 1782, and was dissolved in 1798, leaving debts of over fifty million dollars, which were assumed by the Dutch government.

QUESTIONS AND TOPICS

1. Commerce and industry of the Netherlands in the fifteenth century. [Blok, vol. 2, chap. 12.]

2. Commercial considerations involved in the revolt of the Netherlands. [Rogers, Holland, Cambridge Mod. Hist., or one of the older books like Motley.]

3. Beginnings of Dutch commerce with the Indies. [Blok, vol. 3, chap. 9.]

4. From what Dutch source were the names Tasmania, Van Diemens Land, New Zealand, derived; when and how were they attached to countries later bearing them? [Encyclopedia.]

5. The Dutch in North America; was their commerce with New Netherlands important, and did the loss of their possession affect seriously their carrying trade? [See manuals of U. S. history and the references given in them; note the effect of the English Navigation Acts.]

6. The Dutch in South America. [See Edmundson, Dutch trade on the Amazon, English Historical Review, 1903, 18: 642–663, and later.]

7. The policy of the East India Company: trade and territorial expansion, monopoly, regulation of production. [Day, Dutch in Java, chap. 2.]

8. The Dutch in the East Indies. [Rogers, Holland, chaps. 20, 22.]

9. Write a report on Dutch commerce at the height of its prosperity: countries traded with, wares, shipping, fisheries. [Blok, History, vol. 4, book 6, part 3, chap. 1, part 4, chap. 4; vol. 5, book 7, chap. 4.]

10. The Bank of Amsterdam; its peculiarities and historical importance. [Rogers, Holland, chap. 24; Adam Smith, Wealth of nations, Book 4, chap. 3; C. F. Dunbar, Theory and history of banking, N. Y., 2d. ed., 1903, chap. 8.]

11. Forerunners of modern trusts in the Netherlands. [A. Sayous Early trusts in Holland, Political Science Quarterly, N. Y., 1902, 17: 369–380.]

12. The naval war of the English and Dutch in the time of Cromwell and Charles II. [Manuals of English history.]

13. Dutch commerce in the period of its decline. [Blok, History, vol. 5, book 8, chap. 5; vol. 6, book 9, chap. 3, book 10, chap. 4.]

14. Internal troubles of the Dutch. [Rogers, Holland, chap. 34.]

15. The "contingent system" of the Dutch East India Company. [Day, Dutch in Java, p. 61 ff.]

16. Organization of the Dutch East India Company, and its faults [Dutch in Java, chap. 3.]

BIBLIOGRAPHY

The English economist, James E. Thorold Rogers, has included in his * Story of Holland, N. Y., Putnam, 1889, several chapters on topics of economic importance. A better, though larger and more expensive work, is Blok's ** History of the people of the Netherlands. N. Y., Putnam, 5 vol., 1898–1912.

I have attempted to cover the colonial and commercial history of the Dutch in their most important dependency in The Dutch in Java, N. Y., Macmillan, 1904.

CHAPTER XXI

ENGLAND: SURVEY OF COMMERCIAL DEVELOPMENT

227. Survey of England's position and resources about 1500. — The importance which English commerce assumed in this period and has since maintained, justifies us in pausing at the start to consider the conditions prevailing at the beginning of the period, about 1500.

England and Wales together had an area much smaller than that of most of the important continental states, about equal to the area of Illinois, and less than that of New England. Ireland was a sort of colonial possession, counting for little; Scotland remained till about 1700 an independent kingdom, and continued to be relatively unimportant after the union. England (a term which will be used roughly for other parts of the United Kingdom as they were included) had from nature one endowment of supreme advantage, separation by the Channel from the Continent, which made unnecessary for defense the government of a military absolutism, and allowed an early development of popular freedom.

From the economic standpoint, however, the climate favored grazing rather than tillage, and the mineral resources, aside from tin, were still of comparatively little use. England was a poor as well as a small country in 1500, needing to rely upon the energy of the people and upon their cooperation among themselves and with the government to win a place among the leading countries.

228. England's chief advantage; her advanced organization. — Progress had been made, however, in various lines of which the importance was to appear as time went on. Serfdom had disappeared from the country districts, and production was stimulated by a fair reward for work well done. On the basis of their flourishing sheep industry the English had built up a cloth manufacture which had outgrown the narrow restrictions of the old gild system, and won the inestimable advantage of an organization like that of modern times; the industry was not so much ruled by antiquated custom or by the laws of politicians, as guided by specialists who had invested their capital in manufacture or trade, and who linked their fortunes with progress and extension.

229. Benefits of the English political constitution. — Finally, in summing up the advantages which the English of this period enjoyed, we must put as perhaps the chief and certainly a very important one, their political development. They were not only spared from the necessity of using their resources to repel a foreign invasion, they had attained to national unity among themselves; and they had a government which, however crude it may seem now, was much more closely in touch with the people than that of most states, and which proved capable of further development at comparatively slight expense, measured in men and money. The student who, in estimating the commercial assets of England during this period, left out of account the English constitution would go wide of the mark. Spanish inquisition and expulsions, Dutch corruption, French oppression and revolution, German or Italian disunion — to be free from these was worth great wealth.

230. Development of the English into an active commercial people about the fifteenth century. — The English historian, Seeley, combats the idea that it is "in the blood" of Englishmen, that it is "the genius of the race" to be a maritime and colonizing people. During the Middle Ages, in fact, the English were not great navigators, in spite of the facilities offered by the excellent harbors and the rivers penetrating far inland; English commerce was carried on largely by foreigners, as has been said in a previous section. The advance of the English from passive to active commerce came at the close of the Middle Ages, in the fifteenth and sixteenth centuries. In 1400

English merchandise was mostly borne in foreign ships; in 1500, it is said, English vessels carried more than half of all the cloth exported, and about three fourths of all the other wares.

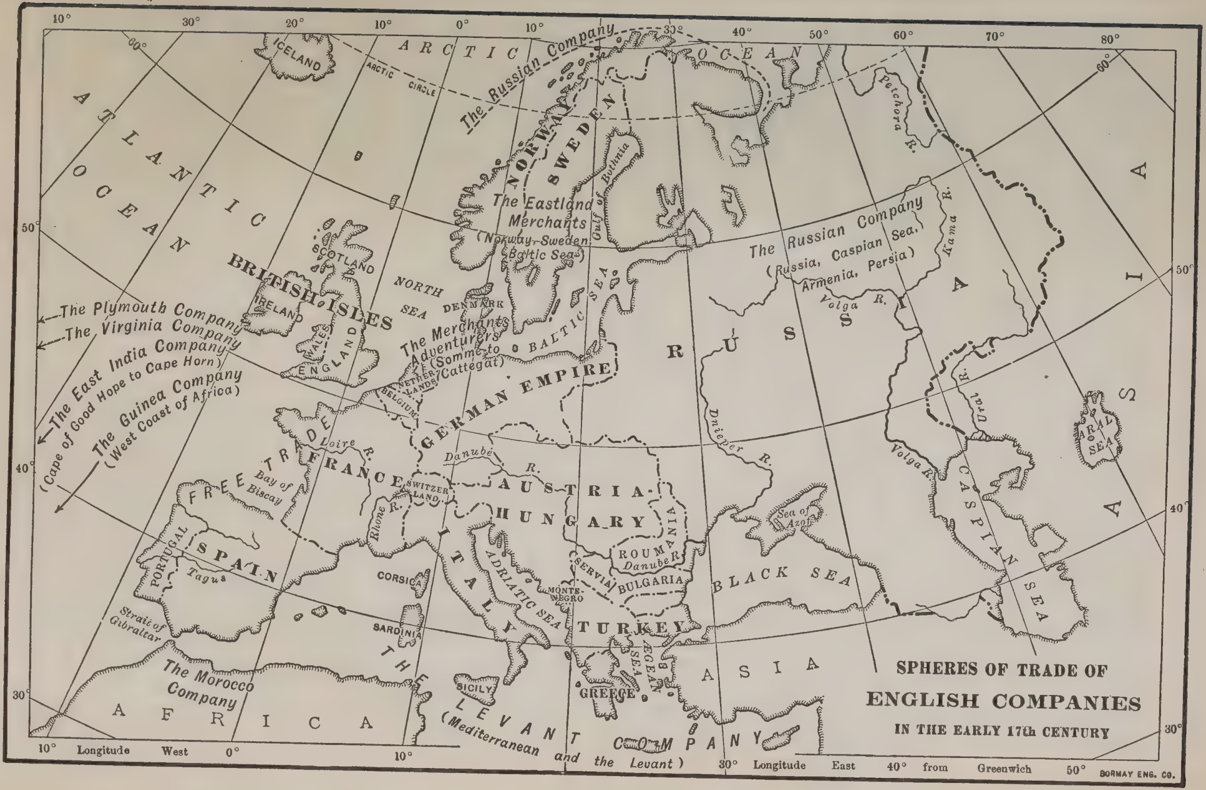
231. Agencies helping to extend English commerce. — Among the influences aiding the development of English commerce in this period we must put the skilful diplomacy of the sovereigns of the Tudor line, which secured important privileges for English merchants in other countries, and the energy of the fellowship of Merchants Adventurers, which made the most of these privileges. The Merchants Adventurers differed from the Merchants Staplers (see section 126), in three important points, each of which marks an advance: they were all native Englishmen instead of foreigners; they exported manufactured goods, chiefly cloth, instead of raw materials; they were not bound to a fixed staple but "adventured" to different places. Though the association was not nearly so close as that of later stock companies, it was strong enough to protect the interests of English commerce against abuses by individual merchants and attacks by foreigners; and was especially helpful in pushing English trade along the coast of the North Sea (Flanders, Netherlands, Germany).

232. Enlargement of the commercial area. — Beyond these nearby districts English merchants were building up an important trade with Spain and Portugal in the South, and with the Scandinavian countries in the North, where the Hanseatic League was now unable to hold its own. English ships were voyaging further still. Bristol merchants like Sturmys and Canning built up merchant fleets of considerable size, and sent them as far as the eastern shore of the Mediterranean and the coasts of Iceland and Finland. A London grocer recorded in his diary about 1550 the voyage of an English vessel to "Russier" laden with "English bookes of the Scriptures" and with other wares which probably sold to better advantage.

Nor have we yet reached the limit of English voyages. American readers are familiar with the exploits of the Cabots, which began a series of frequent voyages to America, and which were followed by daring expeditions to the far North in search of a passage to India, either east or west. These distant voyages were too venturesome as yet to be the means of regular commerce; they sought rather discoveries or plunder. The English merchant who went outside the narrow circle of civilized Europe turned his hand chiefly to smuggling, kidnapping, robbery, and murder. John Hawkins shared with Queen Elizabeth the profits of the African slave trade, and was proud to add to his coat of arms a demi-Moor proper, bound with a cord, to record his achievements.

233. Relative standing of the English ports. — An idea of the relative rank in foreign commerce of the English ports can be gained from the proportions which they contributed to the customs revenue. The most striking fact is the immense lead of London over other ports, like that of New York in the United States now; it contributed half of the total in the time of Henry VII (say 1500). The second port, Southampton, fell in this period from 18 per cent to 9 per cent; the Flanders galleys had ceased coming, and the Guinea trade, by which it revived later, had not yet begun. Newcastle upon Tyne paid 5 per cent of the total, while the port of Bristol, destined to be later the great haven for the American trade, paid only 3 per cent and was exceeded by Boston. No other port than those named contributed as much as 3 per cent of the total customs revenue. The list of minor ports comprises some which had been great in the Middle Ages but which were now rapidly declining in relative importance (Ipswich, Sandwich, etc.), some, like Hull, which were destined to grow in importance, while great modern ports like Liverpool and Cardiff are not yet heard of at all.

234. Partition of the field of commerce among companies. — The reader will remember the discussion in a previous section of the difficulties experienced in this period when commerce was left to individuals, and the reasons for the association of the merchants who traded to any country. With that dis-



SPHERES OF TRADE OF ENGLISH COMPANIES IN THE EARLY 17th CENTURY cussion in mind the organization of English commerce in the period of the later sixteenth century and following years will not seem so strange as it may appear to be at first. An ordinary Englishman could trade about 1600 with only three countries: France, Spain, and Portugal. Commerce with the rest of the world could be carried on only by members of specific companies, who had mapped out and occupied the routes of trade much as modern railroads divide the territory inside a country. Beginning in the North and going around the compass the companies were as follows: the Eastland Company, trading to Scandinavia and the Baltic; the Russia Company; the Merchant Adventurers, controlling trade from Denmark to France, where the free-trade gap appears; the Levant Company, trading in the Mediterranean; the Guinea or African Company; the East India Company, with its immense Asiatic field; and then the various companies familiar to students of American History, the Virginia Company, the Plymouth Company, later the Hudson's Bay Company, etc. By means of the trade of these companies England marketed her surplus wares, especially her woolen fabrics, and imported the goods of which she stood in need — naval stores from the Baltic, manufactures and wine from the Continent, gold from Africa (cf. the English "guinea" of twenty-one shillings), Oriental products, and furs and fish from America. The colonies which had been founded in the New World were still too young to affect greatly the sum total of English trade in the early seventeenth century, but increased rapidly in commercial importance.

235. Characteristics of the companies. — In their organization and development these companies show such variety that it is impossible here to do more than indicate some common features of their history. They tended to one of the two types (joint-stock or regulated) which have been described, and sometimes wavered between the two. The monopoly which they enjoyed made them unpopular with the public, who thought that it was used to secure unduly high profits, and still more unpopular with private merchants who were prevented from sharing in the trade. These merchants who could not gain admission to the companies, because of lack of capital, or distance from London, formed a class of "interlopers" or smugglers trading inside the companies' preserves. Toward the close of the seventeenth century the feeling against the companies grew so strong that reform was forced upon them; entrance fees were lowered or exclusive privileges were taken away and the trade was thrown open. Some of the companies continued to exist, however; the greatest of them all, the East India Company, kept its hold on the trade with Asia, and other companies continued as semi-public or private corporations after their chief privileges had been annulled. The Levant Company was not dissolved till 1825, and the Hudson's Bay Company is still in existence, as an ordinary trading corporation.

236. Rapid growth of commerce in the eighteenth century. — The period in which the companies were most active, roughly the seventeenth century, was preparatory to the period of individual enterprise which in the eighteenth century brought England to the leading position among the commercial states. The advance is shown by the following table, giving in *millions* of pounds sterling (and a rough equivalent in dollars) the annual average of trade in the different periods:

Average of	Imports		Exports	
1698–1701	£ 5.5	$ 27	£ 6.4	$ 32
1749–1755	8.2	41	12.2	61
1784–1792	17.7	88	18.5	92
1802	31.4	157	41.4	207

The figures show that the foreign trade of England grew between five and six fold in the course of the century; that it advanced considerably in the first half, but moved with the speed of a revolution in the second.

237. Relative share of different continents in English commerce. — An indication of the direction of the trade, and of the relative importance of different elements in it, is given in the following tables, the figures again being simplified to round *millions*. The commerce of England was distributed as follows:

	Europe		America		Asia		Africa		Total	
1698–1701 . .	£ 9.2	$ 46	£ 1.7	$ 8	£ 0.8	$ 4	£ 0.1	$ .5	£ 12.0	$ 60
1749–1755 . .	13.8	69	4.5	12	1.8	9	0.2	1	20.4	102
1784–1792 . .	19.6	98	10.8	54	4.9	24	0.9	4	36.2	181
. . . 1802 . . .	39.4	197	23.3	116	8.7	43	1.3	6	72.8	364

The student may perhaps need the caution that he should not attempt to learn outright such statistics as are given here; the attempt would be a waste of energy. The figures give more concisely than any other method of description the measurement of a country's commerce, and are valuable for reference. They must, however, be translated into a more simple expression of facts before an ordinary student can grasp their significance and hold it permanently in mind. In the few lines of text following the first table the author has suggested the most obvious conclusions to be drawn from it, and will point out others applicable here.

The trade with Europe was still by far the most important part of English commerce, being equal to more than all the rest of the trade together. It grew steadily throughout the eighteenth century, as the figures show, but still it was a less important part of the whole in 1800 than it had been in 1700. At the earlier date other continents furnished but one fourth of the total; in 1800 they furnished nearly one half. The two most important, America and Asia, were coming up with nearly equal speed, their commerce increasing roughly fivefold in the course of the century. America had a clear lead over its older rival, while Africa counted for very little in the total.

QUESTIONS AND TOPICS

1. Town life and trade about 1500. [Soc. Eng., 3: 131–145.]
2. Economic and social conditions in England in the sixteenth century. [Harrison's Description, ed. by L. Withington, London, 1902,

readable but too diffuse for a student who has not learned to select what he needs from a book.]

3. Significance of the "enclosures" in English agriculture. [Soc. Eng., 3: 544–550; 4: 114–118, 239–241.]

4. Development of the manufacturing system, as seen in the cloth trade. [Ashley, Eng. econ. hist., vol. 2, chap. 3.]

5. Political conditions about 1500. [Seebohm, Prot. rev., 46–55.]

6. The Merchants Adventurers: who were they, in what did they trade and with what countries, principles of organization, services to English commerce? [Lingelbach, Merchants Adventurers, Univ. of Pa. Pub., 2 series, vol. 2, N. Y., 1902, or Cunningham, Growth; brief account in Cheyney, Eur. background.]

7. English discovery and exploration in the sixteenth century. [Soc. Eng., 3: 209–228; 477–508.]

8. Write an account of the career of Hawkins. [Payne, Voyages; J. A. Froude, English seamen, N. Y., Scribner, 1895.]

9. Write a similar report on Drake. [Same references, or Oxley, chap. 5.]

10. Indicate on a sketch map the position of ports named in sect. 233, drawing a line by each port with a length proportional to the importance of the port. What are the chief ports now? [See a later section of this book and its note; Statesman's Year-Book.]

11. Select one of the companies named in sect. 234 and report in detail on its commerce and career. [Hewins, Eng. trade; Cunningham, Growth, with references. Brief narratives of the East India Company and of the Hudson's Bay Company will be found in Oxley, chaps. 8. 9.]

12. Struggle between the East India Company and the interlopers. [Cunningham; Hunter, Hist. of British India.]

13. Prepare a graphic chart of the figures in sect. 236 in the following manner. Draw a perpendicular line at the left-hand edge of a sheet of paper, mark off two equal spaces, and place the dates, one at the top, one in the middle, and the last two on either side of the end of the line. Lines are then to be drawn, horizontally, proportional to the figures of trade at each date. This can readily be done with the aid of a foot rule, divided into fractions of an inch. Choose first the largest figures of the table, in this instance those for 1802, to be sure of having room enough on the paper for all the lines. Let one of the small divisions of the rule represent a sum of a million pounds or ten million dollars. If, for instance, $\frac{1}{16}$ is taken to represent a million pounds, the line for the imports of 1802 will be a little short of two inches ($\frac{31}{16}$). Let this line then be continued by a dotted or wavy line to represent exports; the continuation in this case would be a little over $2\frac{1}{2}$ inches, and the whole line would be a little over $4\frac{1}{2}$ inches ($\frac{72}{16}$). Pursue the same method with the other

figures, and the result will be a graphic representation of the course of trade during the period.

The scale may be varied to suit convenience, but of course figures cannot be directly compared with each other unless they are plotted to the same scale.

14. Prepare a chart by similar methods, but using different colors or characteristic lines to indicate trade with different regions.

15. Reduce the figures of trade with different continents to percentages of the total, at different periods.

Make up your mind as to the number of conclusions to be drawn from the tables which you are capable of remembering — whether one, two, or more; resolve to remember those and to refer back to the tables for the others.

BIBLIOGRAPHY

As Gross, Sources, does not cover the modern period, the student in search of more extended bibliographical information than that given here must rely on less satisfactory guides. Cunningham, ** Growth, will be the best for an advanced student; see the foot-notes and the bibliographical index. Traill's ** Social England contains less scholarly but perhaps more useful bibliographies on commerce and kindred topics. Some of the school manuals give classified references; Andrews' * History can be especially recommended.

Of the general works on English history in the period under consideration the following pay some consideration to commercial development, and those which are starred present information that is valuable and easily available: * Busch, Froude, Gardiner, Macaulay, Stanhope, * Lecky. If a single work is desired for collateral reading the best is Traill's ** Social England, to which I have in large part confined my references for topical reading.

Cunningham, ** Growth, is indispensable for this period; I assume that this book is in the hands of the teacher and that he will avail himself of the abundant material it offers for reading and written reports. Besides smaller books on English economic history, already mentioned, the following can be made useful: Hewins, ** English trade; Seeley, * Expansion; Toynbee, Industrial revolution. Bourne, * English merchants, is useful; his English Seamen is unfortunately out of print. There is a considerable literature, however, on the war and merchant navy, especially in the sixteenth century (see references in Social England); and Lindsay and Cornewall-Jones cover the entire period.

CHAPTER XXII

ENGLAND: EXPORTS

238. Survey of topics to be considered in studying the development of English commerce. — Such is the bare outline of the development of English commerce in the period preceding 1800. Two chapters will now be devoted to the discussion of facts which will fill in the outline and will explain the development. That the reader may follow more intelligently a survey will be given in this place of the topics to be considered, and their bearing on the general question.

We must know (1) the character of English exports. The exports of a country show in what lines it is strong enough to compete with foreign producers, and are the means by which it buys commodities produced abroad. We shall then consider (2) the advantages which enabled England to produce these wares so efficiently that other countries were glad to buy of her, and (3) the countries in which these wares found a market. On the other side we want to know (4) the imports, the wares which England wanted but could not herself produce to advantage, and (5) the countries from which the imports came. Another factor of importance will be (6) the development of English shipping. Finally we have to consider (7) the government policy by which statesmen sought to further and regulate the development, as manifested in foreign policy and wars, in the customs tariff, and in the colonial system.

239. (1) **Analysis of exports.** — The total export to foreign countries of merchandise of English origin (*i.e.*, not including goods from other countries transshipped in England) amounted about 1800 to a little over £29,000,000. The most important items were as follows, in millions of pounds: manufactures of wool, 7.7, or over one fourth of the whole; manufactures of cotton, 4.1; manufactures of iron and steel, 2.0; haberdashery, 1.5; linens, 1. These five items include over one half of the total, and no other item amounted to as much as one million. It is noteworthy that all the raw materials together scarcely exceeded one million. When we come to study the internal development of England we must look, evidently, for a great expansion in certain manufacturing industries to explain the position which their products now took in trade.

240. (2) **Development of production, explaining the growth of the export trade. Agriculture.** — Turning our attention now, not to the foreign commerce of England but to the conditions at home which made this commerce possible, we find that during the two centuries following 1600 there was a steady development of internal resources. The growth of population stimulated improvement in agriculture; and cultivators managed, by new crops and methods, to increase largely the output in spite of the disadvantages of soil and climate. Root crops (turnips and carrots) and clover were grown on fields which before had been allowed to lie fallow, and the produce, converted into meat and manure, was almost pure gain. By better feeding and breeding the weight of a head of stock was increased twofold or even more. Potatoes and other vegetables were introduced from America and the Continent. Capitalist farmers effected such a revolution in the methods of agriculture, that pasture farming became relatively much less important, and the production of cereals increased so that there was a food supply to maintain a manufacturing population, and sometimes a surplus for export.

241. Internal commerce and means of transportation. — The conditions of internal commerce, measured by the difficulties and dangers of road transportation, were still bad at the beginning of this period, but improved rapidly in the eighteenth century. A writer said in 1767: "There never was a more astonishing Revolution accomplished in the internal system of any country than has been within the compass of a few years in that of England. The Carriage of Grain, Coals, Merchandize, etc., is in general conducted with little more than half the Number of Horses with which it formerly was. Journies of Business are performed with more than double Expedition. Improvements in Agriculture keep pace with those of Trade." The canals, which were extended rapidly after the success of the Bridgewater Canal, constructed in 1758 to connect Manchester with coal mines seven miles distant, lowered the cost of transportation to one quarter or less, in the districts which they served. As a result manufacturers could rely on a steady supply of raw material for their works, and of food for their employees, and had also a chance to put their finished goods on the market. The eighteenth century, moreover, was a period of great development in English banking, and the extension of credit operations was at the same time an effect and a cause of the growth of trade.

242. Manufactures; advance from the gild to the domestic system and its significance. — We turn now to the history of English manufactures, a topic which is not only, as we have intimated, of great importance for the growth of English commerce, but which is of general interest as showing the stages of development through which other countries passed later.

Gilds still persisted in England, but they had lost the power of control which they had formerly had and which they still maintained on the Continent. The more important industries had passed into the stage known as the "domestic system." The change, at first view, is not striking, for the manufacturing was still done by petty artisans working at home with their own tools. The ownership of the raw material, however, had passed from the artisans to an employer, who took the risk of the manufacture and reaped profits corresponding to his success in conducting it.

Brain power now took a place in manufactures above hand power. The new class of employers were men who could devote their energy entirely to studying the larger questions of production. They had the chance to look away from the petty details of work, which had for centuries absorbed men's attention, and to become both broad-sighted and far-sighted. They studied the needs of the market, at home and abroad; they bought the raw material wherever it could be had best and cheapest; and then marketed the product, wherever it would bring them the best returns.

243. The new employers aided by the immigration of foreign laborers. — Success in manufacture still depended largely on the quality of labor, and one great advantage which England owed to her political and religious freedom was the immigration of skilled laborers seeking refuge from the persecutions of the Continent. Refugees, of whom the Huguenots from France were the most important, brought with them improvements in the woolen manufacture and stimulated the development of other industries: silk, linen, cotton, calico, paper, etc. It is, however, hard to see how the labor of these people could have had a great effect in extending foreign trade if they had not been guided by their employers, who were men of considerable capital, with broad views and wide acquaintance, willing to take large contracts and eager to extend the market for their goods. An English pamphlet of the period says that the towns in which the silk and cotton manufactures developed owed their industries "to the public spirit of two or three men in each." The development of this process, by which artisans lost their former independence and came to work for an employer, can be seen from a statement of the economist Adam Smith, who wrote in 1776. "In every part of Europe," he said, "twenty workmen serve under a master for one that is independent." This was not yet true of "every part" of Europe, and even in the western states of the Continent the process had not advanced so far as in England, where the author had made most of his observations.

244. Dependence of technical progress on the new class of employers. — It is noteworthy that the great inventions to which the modern development of manufactures has often been ascribed could not have been made of practical importance unless this system of organization had developed previously. The gilds were bitterly opposed to any changes in their system of routine, and independent artisans would not find it worth their while to introduce costly improvements. Many inventions had been made before the eighteenth century which would have been of the greatest importance in manufacture if there had been any one to take them up and put them through; they fell dead, however, on the world of their time, or were killed by the opposition of petty producers. An illustration of the way in which premature inventions disappeared can be given from the experience of a man who, to all appearances, had devised a repeating firearm before the end of the sixteenth century. A German recommended to an English statesman "one of his countrymen, who had invented a harquebuse, that shall containe ten balls or pelletes of lead, all the which shall goe off, one after another, having once given fire, so that with one harquebuse one may kill ten theeves or other enemies without recharging." The importance of such an invention needs only to be suggested, but, so far as the writer knows, nothing further was heard of it.

245. The domestic system preparatory to the great revolution in manufactures in the eighteenth century. — Not until the latter part of the eighteenth century were the times ripe for the great technical changes in manufacture, which the introduction of machinery implied. Then the advance came with the speed of revolution. In the lifetime of an ordinary man (1770–1840) the whole face of England changed; the great textile towns and the "black country" of the coal and iron industry grew up; canals and railroads cut through the agricultural districts to connect the industries with each other and with the outside world; a social and political revolution accompanied the economic. No attempt can here be made to describe the changes in detail, and the discussion of the factory system and other features of the present organization to which they gave rise can better be postponed. The following paragraphs will suggest the development in some of England's chief export industries.

246. Progress of the cotton manufacture. — The cotton manufacture was the first to show the possibilities of the application of machinery. Two main processes are to be distinguished in the manufacture of cotton, as in that of other textiles; first, the spinning of the yarn from the fiber, and second, the weaving of the yarn into cloth. The first great improvement was the invention by Kay in 1738 of the fly-shuttle, which saved the time and energy of the weaver and enabled him to double his output of cloth. Still, the industry was small and grew slowly. The amount of raw cotton imported from Turkey and the West Indies would seem now perfectly insignificant, and was exceeded by the amount of linen yarn imported from Ireland alone. The cotton manufacture was hampered especially by the slowness of cotton spinning (six spinners working with the old-fashioned wheel were needed to supply yarn to one weaver); and by the weakness of the yarn, which required linen to be used for the warp of cloth. Inventions which met these difficulties were the spinning-jenny of Hargreaves, patented 1770, which enabled a spinner to make eight threads at once instead of one (later, twenty, thirty, even one hundred and twenty); and Arkwright's roller spinning frame, patented 1769, which made cotton yarn strong enough for warp, by stretching the strand before it was twisted. Improvements followed in other processes (carding, printing, etc.); water-power was used more generally, and a mere beginning made with the application of steam. A Kentish clergyman, Cartwright, invented a power loom which greatly increased the possibilities of weaving but which did not become a practical success until the nineteenth century; long after 1800 the hand-loom weavers kept up a hopeless struggle in competition with it.

The full effect of all these changes was not felt until the nineteenth century, but their importance in this period can be measured by the imports of raw cotton. In the forty-three years, 1741–1784, the annual imports rose from 4,000 to 28,000 bales, while in the sixteen years following they increased to 150,000 bales (1800).

247. Slower development of the woolen manufacture. — No such rapidity of development as this can be traced in the woolen manufacture, for it had long been England's mainstay, and changed more slowly partly because it was so firmly established. Little by little, however, the spinning-wheel was displaced by the jenny, and other sources of power than the human body were utilized. As in the case of cotton, power weaving was not important until after 1800; but the manufacture of worsteds (in which the fibers are longer than in woolens, and are kept parallel) was greatly helped by a second invention of Cartwright, for wool-combing by machinery.

248. Development of the iron industry with the use of pit-coal. — The only other industry of this period which our space allows us to treat is that of iron. Until the eighteenth century iron was made almost entirely by smelting with charcoal, the primitive process which ~~can be traced~~ back to prehistoric times. A ton of iron required two loads of charcoal, and a load of charcoal two loads of wood, so that the industry depended largely on the wood supply, and was carried on at petty forges scattered through England, but established mainly in the South. A large proportion of the English iron supply was imported from Sweden. Coal, as we use the word, called then pit-coal or sea-coal, had for centuries been mined for domestic use, but had no importance in manufacture. Various men tried to smelt iron by coal or coke, but their experiments had no practical result till about 1760, when blast furnaces using coal were successfully established, and the industry began a period of rapid development, furthered about 1790 by the application of steam-power to the blast. Henry Cort invented in this period the processes by which pig was changed to malleable iron in a coal-puddling furnace, and the malleable iron was worked into bars by rollers instead of by the slow action of forge hammers. The production of iron had increased fourfold (17,000 to 68,000 tons) in the period 1740–1788, and in the period of eight years following nearly as much again was produced (125,000 tons in 1796). The industries depending on iron passed into a new stage, and the large export of iron and steel in 1800 is explained.

249. (3) **The chief markets for England's exports.** — The market for English wares varied, of course, according to the country to which they were sent. The most favorable market for manufactures was afforded by the colonies in America, until the outbreak of the war of independence. The colonists were a high grade of customers; they had cultivated tastes and were willing to work hard to gratify them. By reason of natural conditions even more than by legislation they found it difficult to establish manufactures, and bought manufactured wares of England with the raw products which their environment afforded in abundance. A book published just before the revolution says that the "colonies are furnished from England with materials for wearing apparel, household furniture, silk, woolen, and linen manufactures, iron, cordage, and sails, great guns, small arms, ammunition, lead, brass, iron, and steel, whether wrought or unwrought; in a word England furnishes them with almost everything needful for the luxuries, as well as conveniences of life, except provisions."

In European countries English manufactures did not find such a clear field. There were some branches (silk, linen, lace, paper, tin-plate, etc.) in which other countries were distinctly superior, and no European country depended on England as did the colonies. English woolens, however, went practically everywhere, and other products of the textile and metal industries were sure of a ready market in most countries.

For exports to other continents the English had to choose articles which would stimulate less civilized people to production and exchange. Very considerable sums in gold and silver were sent to Asia, and the half-savage Africans were tempted with gunpowder, iron, rum, spirits, beads, etc.

QUESTIONS AND TOPICS

1. Endeavor to get a clear understanding of the meaning of each of the topics, and of their bearing on each other, by thinking of the present-day commerce of the U. S. and asking yourself: what are the main facts about (1) our exports, (2) our natural advantages, etc. Then ask yourself how knowledge of any one of these topics will be of use to you in understanding the others, and so understanding commerce in general. For instance, what bearing has our tariff policy on our imports and exports, respectively? What are the weaker points in our system of production as shown by imports; what countries are strong in those points? The student is most earnestly advised to learn the contents of this manual by understanding and not by memorizing. He should always be asking himself: what *use* is this fact to me?

2. Transform the figures, sect. 239, into a graphic chart, and compare the results with exports at the present day. [See Statesman's Year-Book for recent figures.]

3. Development of English agriculture in the seventeenth century. [Soc. Eng., 4: 115–122, 439–445; Prothero, * Pioneers and progress of English farming, London, 1888.]

4. Development of agriculture in the eighteenth century. [Soc. Eng., 5: 99–110, 301–305, 452–459; Prothero.]

5. Condition of English roads and of carriage by land. [Cunningham, Growth, vol. 2, sect. 232, and references there; Smiles, Lives of the engineers, vol. 1.]

6. Canals, and their benefits. [Soc. Eng., vol. 5, pp. 322–326; Cunningham and references.]

7. Write an essay on the "domestic" system of manufactures, and the contrast it presents with earlier and later systems. [Hobson, Capitalism, chap. 2, sect. 11; Cunningham, Growth, vol. 2, sect. 227 and following.]

8. The influence on English industrial development of immigration from the Continent. [Cunningham, Growth, vol. 2, sects. 172, 199, 229, etc.]

9. Compare with sect. 244 sects. 283 ff., in the chapter on France, to realize the advantages of the English at this period.

10. Write a report on English manufactures in one of the following periods, from the descriptions in Social England.

(*a*) Seventeenth century [vol. 4, 122–130, 445–454, 581–588.]

(*b*) Eighteenth century, before the great inventions [vol. 5, 110–117, 305–322.]

11. Write a report on the history of one of the great industries (cotton, woolen, iron), choosing one of the following aspects of it: methods of manu-

facture, introduction of machinery, change in organization (domestic and factory system, etc.), importance in commerce. [Besides references like Cunningham and Social England the student will find the encyclopedia and Ure's Dictionary of manufactures helpful, and probably easier to use.]

12. The great inventions. [Social England, 5: 459–474, 591–604.]

13. Write a biographical sketch of one of the following men: Richard Arkwright, Edmund Cartwright, Samuel Crompton, James Watt. [Encyclopedia; Dictionary of national biography; or one of the popular books on the history of invention.]

BIBLIOGRAPHY

On the industrial revolution see, besides Toynbee, Charles Beard, * The industrial revolution, London, 1901, with bibliography of larger works; Usher, * Indust. hist. of Eng., chap. 12–14, treats the technical changes in considerable detail, and gives further references with brief descriptive notes.

The best study of the earlier system of manufacture is George Unwin, Industrial organization in the sixteenth and seventeenth centuries, Oxford, 1904; but Hobson's * Evolution of modern capitalism, new edition, 1916, is better suited to the needs of the elementary student.

On transportation there are good brief and general surveys by Edwin A. Pratt, * History of inland transport and communication, London, 1912, and by Adam W. Kirkaldy and A. D. Evans, History and economics of transport, London, 2d ed., 1920. The most complete account is provided by W. T. Jackman, * Development of transportation in modern England, 2 vol., continuous paging, Cambridge Univ. Press, 1916.

CHAPTER XXIII

ENGLAND: IMPORTS; SHIPPING; POLICY

250. (4) Analysis of English imports in the modern period. — After this survey of one side of English trade we have to consider the other, the imports which England purchased with her surplus wares. In round millions of pounds the imports at the end of the eighteenth century were as follows, in the order of their values: sugar 7.1, tea 3.1, grain 2.7, Irish linen 2.6, cotton 2.3, coffee 2.2, wood 1.5, butter 1.0, tobacco 1.0, hemp 1.0. These wares amounted to more than half of a total import of 42.6. If the list were extended to less important wares a number of manufactured goods would be found on it, but these evidently could in general be produced to better advantage in England than anywhere else. England had already made herself the "workshop of the world," and drew from other countries mainly raw materials and foods which could not be produced at home. Some of the colonial imports were shipped again, as will be shown later, but a large proportion of them was consumed at home by a population which was not only growing in size, but was enabled by means of commerce to gratify its taste for products comparatively new (sugar, tea, coffee, tobacco).

251. (5) Sources of the imports. — At the period when these figures were compiled war had interrupted the trade of England with France and the Netherlands, but an active commerce still continued with other parts of the Continent. The imports from European countries were largely minor manufactures, which do not appear in the list above, but raw materials also were furnished by the less advanced European states. Wool came from Spain; hemp, flax, and tallow from Russia; wood, iron, and copper from Scandinavia.

For some of the most important imports we must look to countries outside of Europe. The trade with Asia supplied all of the tea, and part at least of the other commodities (coffee, cotton, sugar) which we now associate with America, as well as a considerable amount of Indian manufactures, especially textiles. This trade still rested in the control of the East India Company, which had grown to be a great political power in Asia, with a government and army of its own. At home it had had a checkered career. As the result of bitter attacks in the seventeenth century it widened its membership, but it still maintained the monopoly of trade with Asia till 1793, when it conceded to private merchants a certain share in the trade with India.

252. Peculiar character of the English colonies. — It is to the continent of America that we must turn for the field outside of Europe that in its performances and in its promises offered most to English commerce. After the early period of exploration, treasure-hunting, and piracy, English colonization in America developed in a form entirely its own. Emigrants went out, not to seek gold mines or to establish trading stations, but to found homes. Emigration was not so much a government policy as a popular movement, that attracted some of the best stock of English blood. There were great differences between the people of the different colonies on the Atlantic coast, as every student of American history knows, and there was again a difference between the colonies in the South and those on the islands. But in general it may be said that no European country could vie with England in the commercial quality of its colonial population. Certainly none could rival England in the quantity of colonists of European stock. The first census of the United States in 1790 showed a population (nearly four million), merely in this group of former English colonies, amounting to nearly half that in England and Wales.

253. Resources and industries of the colonies in America. —

Though the personal qualities of the English were duplicated on the other side of the Atlantic, the physical environment was absolutely different. Products of the field, the forest, and the sea, which were eagerly desired and hard to get in England, were to be had in abundance in the New World. The conditions for manufacture, on the other hand, were unfavorable; capital and labor found such an attractive field in the extractive industries (the production of raw material), that there was little temptation for the colonies to engage in the finishing of goods. In the plantation colonies of the South and the islands almost nothing was manufactured. Even in the center and North, where the difficulties of life and the talents of the people made manufacture more practicable, most industries were of a household character, rough clothing and implements being made in the spare hours at home; or were ordinary village trades, — milling, tanning, etc. All the fine manufactures were bought from England with raw or semi-raw products.

254. Specialties of different colonies. — The island colonies (Jamaica, Barbadoes, etc.) sent plantation products. The sugar-cane supplied sugar and molasses and, by a simple process of manufacture, rum. American cotton until Whitney's invention of the cotton-gin in 1793 came almost entirely from the islands, and indigo and various drugs were secured from the same source. The colonies on the mainland supplied a greater variety of products, by reason of their climatic differences. Nearly all of them contributed to the supply of skins and furs; and lumber and naval stores (pitch, tar, turpentine) were secured from the forests all the way from New England to Georgia. Different sections, however, had their specialties; the Carolinas sent rice, Virginia tobacco, New England codfish and whale-oil.

255. Commerce with Africa. — There was a marked peculiarity in the commerce with Africa. The exports to this country always exceeded the direct imports by a considerable sum. An English writer of the eighteenth century tells about the manufactures which were sent out, and continues: "we have, in return, gold, teeth (*i.e.*, ivory), wax, and negroes; the last whereof is a very beneficial traffic to the kingdom, as it occasionally gives so prodigious an employment to our people both by sea and land." His meaning is this: the slave trade was so "beneficial" because the slaves which were purchased with beads and rum were not brought to England but shipped to the American colonies where they were put to work. The English figured, therefore, that they got not only the price of the slaves in American products, but also had the business of carrying them to America, and could hope for a future return from their labor in the field. It is estimated that 20,000 slaves a year were sent out during the eighteenth century, and the chief port of the trade, Liverpool, employed 190 ships as slavers in 1771.

256. (6) Shipping and the carrying trade. — At the beginning of the period which we are studying (1500–1600) the English, as we have seen, were emancipating themselves from their former dependence on foreign ships. In the course of the period they learned to carry not only their own goods but those of other nations as well, and took from the Dutch the leadership in the carrying trade of the world. The reader will note, if he refers to the figures showing the trade of England about 1800, that the imports amounted to about 42 million pounds, while the exports of British merchandise were but 29 millions. England would seem to have been gaining a great amount of goods for nothing, or to have been going in debt for them. The difference is to be explained in part by the earnings of English freight, which other countries paid in wares, but in the larger part by the export of goods which were brought to England from other countries merely to be transshipped and exported again. At the close of the century foreign merchandise to the value of over 11 millions was exported, the wares being mainly those of colonial origin (coffee, sugar, Indian textiles, tobacco, tea, indigo, etc.).

257. Struggle of English seamen and government with the

Dutch. — Two separate sets of forces were at work to raise the English merchant marine, those of individuals and those of the government. The English in the seventeenth century could not navigate as cheaply as the Dutch, since they required larger crews for the same work, but they seem in the eighteenth century to have been abreast or ahead of the general development of navigation; and unusual facilities for ship-building were offered to them in their American colonies. The government, on the other hand, was eager to foster every effort to extend English shipping, not only because of its economic advantage, but because of the addition to the naval resources of the kingdom in war with other powers. Until after 1650 the English merchant marine, in spite of individuals and government, was greatly inferior to the Dutch. Statements which are doubtless exaggerated give us still some measure of the difference; the Dutch were said to own four fifths of all the ships engaged in oceanic commerce, or as many as eleven kingdoms of Christendom; ten Dutch ships traded to Barbadoes for one English. The latter half of the seventeenth century is filled with a bitter struggle for supremacy between the English and the Dutch, waged with all the weapons both of peace and war.

258. The Navigation Acts; victory of English over Dutch shipping. — "The first nail in the coffin of Dutch greatness," says an English historian, was the Navigation Act passed under Cromwell in 1651. This was but one of a series of measures extending before and afterward, designed to further the English carrying trade at the expense of rivals. Briefly, goods from a European country could be brought to England only in English ships or in ships of the country, so that, for instance, the Dutch could not carry Baltic wares to England; while the products of other continents could be imported or exported only in English ships; and some wares that were enumerated (sugar, tobacco, etc.) must be brought to England before they could be exported to any other European country. To maintain this policy the English engaged in a long contest with smugglers in America, and fought several great naval wars with the Dutch. The result was, as we have seen, a victory for English commerce over the Dutch, though it is hard to say how much credit should be given the government policy, and how much was due to the energy of the individuals who were building up English business at this period.

The effect of the new oceanic trade was to build up the ports in the West; Liverpool came into prominence in the eighteenth century, and Bristol also grew. The distribution of trade among the ports did not, however, change greatly. An estimate of the eighteenth century gave to London still two thirds of the total, while the remaining third was divided in equal parts among the ports of the east, the south, and the west coasts.

259. (7) Government policy. Commerce and war. — Just as in shipping, so in other commercial interests, the efforts of individuals to make money for themselves were restrained or furthered by government regulations aiming to advance the English people as a whole. Every matter of commerce was at the same time a matter of politics. Mention was made in an introductory chapter of the part played by England in the great wars of the period. It will be remembered that English policy in general was characterized by a shrewd recognition of the commercial advantages to be gained in war, either by territorial acquisitions or by trading privileges, and every war in which England engaged ended, as a rule, with a treaty that gave her some new colonial market or some advantages in trade with a European country. England fought France consistently, not because of old traditions of enmity, but because France was a commercial rival, refusing English manufactures and attempting to market her own in England, and because France had possessions in America and India that England desired. England allied herself with Portugal, on the other hand, because the trade of the two countries was complementary rather than competitive.

260. Customs policy. — The customs policy of the period was governed by mercantilist ideas, described in an earlier chapter. The government drew a considerable portion of its revenue from the customs duties, but nevertheless subordinated the collection of revenue to other considerations in framing the tariff, and regarded it chiefly as a means of building up national power in contest with other states. To further this end the importation of manufactured wares was in many cases taxed or prohibited, that foreigners might not draw money for work which Englishmen were thought competent to do. Raw materials, like wool, which could be used as the basis of English industries, were kept in the country by duties or prohibitions on export; while the export of other wares, which put foreigners in debt to England, was encouraged. Other measures, now inconceivable, were designed to stimulate certain industries; an Englishman could be buried only in a woolen shroud; a Scotchman only in Scotch linen; buttons and buttonholes were regulated by legislation; English ships must carry English sails.

261. Burden of the tariff. — In a sense it is wrong to speak of any "system" of customs policy at this time, for the tariff, by constant changes, had become extraordinarily confused, and included many inconsistencies. "The collection and administration of such a complicated system was most wasteful; while the taxes, when taken together, were so high as to interfere seriously with the consumption of the article and to offer a great temptation to the smuggler." The most rigorous measures failed to stop the smuggling which brought into England a large proportion of the goods on which duties or prohibitions were imposed. Reforms attempted by different statesmen alleviated to some extent the burden of the tariff on merchants, but left it still so heavy and cumbrous that with the advances of the nineteenth century it was felt to be intolerable. In this period almost no one thought of free trade. The tariff undoubtedly stimulated the growth of certain industries (silk, for example), but it is noteworthy that the cotton industry, which was destined to become the most important of any in England, grew up not only without any favor but under actual discouragements.

262. Colonial policy. — An English historian who has been quoted several times before said that England "conquered and peopled half the world in a fit of absence of mind," implying that the movement was one of natural expansion rather than of conscious policy. This seems true when we contrast English colonization with that of other powers. Still, the government held from the first the idea that the colonies were a part of the home country, and should contribute in special ways to its advancement, and these ideas grew stronger and took more definite form as the colonies grew in size. The government permitted the movement of men and capital to America under the condition that the resources of the colonies should be made to supplement, not compete with, the resources of the mother country. We have to note here the regulations in which the government ideas were embodied.

263. Restrictions on colonial enterprise, regarded as justifiable at the time. — By the application of the Navigation Acts the colonists were required to employ English ships for their commerce, and to send certain enumerated wares of their production to England before they could be disposed of to another country; and by other acts they were restricted in the manufacture or exchange of certain **articles** (woolens, hats, bar-iron, and steel) for which English manufacturers desired to reserve the market. Aside from these restrictions the colonists were left free to produce and to trade as they pleased. They paid the usual duties, as a rule, on wares entering the English ports, but were allowed a drawback when the wares were exported again.

Comparing these restrictions with, for instance, those of Spain, we are struck with their liberality; still more so when it is added that the government gave some special favors to the colonists in the form of bounties, and colonial ships were put on an equal footing with those built at home, so that New England was a great gainer by the stimulus to ship-building and sailing. England was the natural market for most of the colonial wares, and the colonists, as we have seen, had few temptations to go into manufacturing. None of these restrictions, therefore, bore with great weight on the colonists, and an attempt to interfere in their trade with the French West Indies (by the Molasses Act of 1733) was evaded. The English colonial system was accepted as natural and reasonable by the colonists in general until shortly before the Revolution.

QUESTIONS AND TOPICS

1. Make a graphic chart of imports and compare with present conditions, as suggested above under exports.

2. Insert the wares named in 251 and the following sections in the chart of imports according to continents, sect. 237.

3. History of the East India Company in the eighteenth century. [Cunningham, Growth; B. Willson, Ledger and sword, London, 1903, vol. 2.]

4. Compare the colonial market of England with that of Spain (see chap. 20) and that of France (see chap. 25).

5. Write a report on the economic and commercial characteristics of one of the thirteen colonies, in the period preceding the Revolution. [See the chapters describing the condition of the separate colonies in 1765, in Lodge, English colonies, N. Y., Harper, 1881, $3.]

6. English imports of naval stores, and schemes to stimulate exports from America. [Lord, Industrial exper., part 2.]

7. Write a report on the commercial history of one of the island colonies, (*a*) Jamaica, or (*b*) Barbadoes. [See encyclopedia, and references there; R. Montgomery Martin, History of the British colonies, London, 1834, vol. 2, chap. 2, Jamaica; chap. 7, Barbadoes, chap. 16, West Indian commerce; Amos K. Fiske, West Indies, N. Y., Putnam, 1899, $1.50, chaps. 18–19, Jamaica; chap. 37, Barbadoes.]

8. History of the African trading companies. [Cunningham, Growth, vol. 2, sect. 194.]

9. History of the slave trade. [Cunningham, index, and references in his notes; Weeden, index; Encyc. Brit.]

10. The plantations, the Royal African Company and the slave trade, 1672–1680. [E. D. Collins, in Rep. of Amer. Hist. Assoc., 1900, Washington, 1901, vol. 1, pp. 139–192.]

11. History of the merchant navy; development of ship-building and navigation. [See the articles on the Navy, by W. Laird Clowes, Soc. Eng., vols. 3, 4, 5. The student should endeavor to extract from these

articles, which are rather fragmentary, only those facts which bear on the merchant marine, and should guard against confusing this with the war navy.]

12. Write an essay on the colonial and commercial aspects of Cromwell's foreign policy. [Reference may be made to the following, among the biographies of Cromwell: F. Harrison, Lond. 1888, chap. 13: Firth, N. Y. 1900, chap. 19; John Morley, N. Y. 1900, book 5, chap. 8; Roosevelt, N. Y. 1900, p. 225 ff. See also Frank Strong, The causes of Cromwell's West Indian expedition, Amer. Hist. Review, Jan., 1899, 4: 228–245; George L. Beer, Cromwell's economic policy, Polit. Sci. Quarterly, 1901, 16: 582–611; 1902, 17: 46–70.]

13. Of what country would ships have to be, according to the Navigation Acts, to carry: wool from Spain; gold from Africa; spices from India; furs from America?

14. The policy of the Navigation Acts and their effects. [Cunningham, Growth, vol. 2, sects. 204, 222.]

15. Rise of the port of Liverpool. [Encyc., and references there.]

16. Report on one of the three commercial treaties, of 1703, of 1713, and of 1786, as illustrating the policy of the period. [Hewins, English trade, chap. 5.]

17. Abuses of the customs duties, and the reform by the younger Pitt. [Lecky, Hist., chap. 16, Cabinet ed., 5: 295 ff.]

18. The commercial legislation of England and the American colonies, 1660–1760. [See the article with that title by W. J. Ashley, Quarterly Journal of Economics, 1899–1900, 14: 1–29; republished in his Surveys, London., 1900.

19. American smuggling, 1660–1760: to what extent was it practised; does it prove the English policy to have been oppressive? [Ashley, Surveys, 336–360.]

BIBLIOGRAPHY

See chapter xxi.

CHAPTER XXIV

FRANCE: SURVEY OF COMMERCIAL DEVELOPMENT

264. Natural advantages of France in the modern period. — In preceding sections we have considered countries which for a time took the leading place in commerce among the states of Europe. We have now to study the development of the other states, to understand the share they took in commerce, and to note so far as possible the causes which kept them below the leaders.

Taking first France, we find a country which throughout the period enjoyed the reputation of being the richest state of Europe. Not only in area and population did it greatly exceed its traditional rival, England; it had also advantages of soil and climate which caused it to be regarded as favored beyond all others. Fronting both the Mediterranean and Atlantic, with easy access to the North Sea and Baltic, it had a better position for the sea commerce of the period than any other country, while internal transportation was facilitated by a remarkable system of navigable rivers, that brought the interior of the country into easy communication with the coast. Nor can we say that the French people of this period were inferior to those of other countries in their economic capacity. Before the beginning of the period and at intervals during its course they give evidence of productive ability which would have led to very different results under conditions such as more favored people, like the English, enjoyed. This holds true even of manufacturing, a branch of production in which the French have commonly been considered inferior by natural bent to the English.

265. The chief reason why France did not rise to leadership.

— In spite of size, resources, and population, France did not rise above the second place mainly through the fault of the French *organization*, the arrangements that the French nation had for working together. We may compare the French state to a modern industrial corporation, which has a large capital invested in a valuable plant, and has good business openings; but in which the business is wrecked by quarrels among the stockholders, and by such a poor organization that president and directors can disregard the interests of the stockholders, can conduct affairs for their selfish profit, and can waste the company's resources in enterprises that do not pay. The point will be made more clear if, as an introduction to the history of commerce in France, we sketch the general history of the country from the later Middle Ages to the French Revolution of 1789.

266. Progress checked by the Hundred Years' War with England, and by religious conflicts. — In the fourteenth century it seemed as though France were going to lead Europe in the development of a new period. Agriculture and manufactures were flourishing; internal trade was active; and French shipowners, growing accustomed to longer voyages, ventured far down the west coast of Africa and established trading stations even on the coast of Guinea. The country was plunged again into a condition of medieval chaos by the Hundred Years' War (1336–1453), a war that hurt France vastly more than England because it was fought entirely on French soil. French and English armies, and "free companies" of organized bandits ravaged the country; the weight of taxes grew; trade dwindled, cities declined, and artisans emigrated.

The country had hardly recovered from this war (which ended in 1453), when it was again disturbed, this time by a series of civil wars between Protestants and Catholics, attended by the same unfortunate economic effects. The religious conflict was finally closed by a settlement which was even more disastrous; the French Protestants, to the number of nearly half a million and making up the most valuable industrial element in the population, were expelled from France as the Jews and Moriscoes had been expelled from Spain. The loss to France can be measured by the gain of other countries; the establishment and development of important manufactures can be traced in each of three countries, England, Prussia, and the Netherlands, to the influx of the Huguenot refugees.

267. Effect of the absolute monarchy on French development. — France secured finally freedom from foreign invasion and from internal dissension, but at a terrible cost. The whole power of the state was vested in the hands of the king. The stockholders lost all power to direct the concerns of the company. Rarely this power was exercised by a king both wise and strong, like Henry IV. During the long reign of Louis XIV it was wielded by a king who was strong but who was not wise; who wasted the rich resources of his country in fruitless wars, while he neglected the opportunities for reforms at home and for commercial expansion abroad. Too often the rule was held only in name by the king, but in fact by the royal favorites, worthless adventurers who by pleasing the taste of the sovereign gained the power to direct as they chose the policy of this great country. This evil is especially marked in the eighteenth century, when England was prepared to take advantage of every mistake of France, in building up her world power.

268. Failure to reform conditions inherited from the feudal period. — The absolute monarchy played a vital part in the history of French commerce, not only by its disregard of commercial interests abroad, but by its lack of business sense in home affairs. As the details will appear in the following pages it is necessary here to call attention only to some general points. The kings did not complete the unification of the country by breaking down the feudal toll barriers, of which some remained until the Revolution. They encouraged the separation of classes, just as they allowed the separation of sections; the French were split into groups, mutually jealous and hostile, which lacked the feeling of common interest, and were unable to cooperate. The most serious distinction between classes was in regard to taxation. Nobles and clergy were granted privileges, often of a kind that hindered production, while they paid very little to the public treasury. The productive classes, on the other hand, the business men and laborers, bore nearly the whole burden. The weight of this burden was tremendous, for the machinery of government had become more and more complicated and more and more inefficient with the passage of time, so that the government had to demand a great deal from the taxpayers to accomplish very little in the public service. An idea of the condition in the eighteenth century can be gathered from the fact that the peasant is estimated to have paid from one half to four fifths of his gross income to a government which gave him almost nothing in return.

269. Bloom of French commerce in the fifteenth century as shown in the business of Jacques Cœur. — Returning now from this political survey to the history of commerce proper, we find before the year 1500 one name standing out prominently in the history of French commerce, that of Jacques Cœur, a merchant of Bourges. A contemporary says of him: "His ships carried to the East the cloths and merchandise of the kingdom. On their return they carried back from Egypt and the Levant different silk stuffs, and all kinds of spices. On their arrival in France some of these ships ascended the Rhone, while others went to supply Catalonia and the neighboring provinces, competing in this way with the Genoese and the Catalonians in a branch of trade that up to that time they alone had exploited." At the height of his fortunes, about 1450, he had a silk factory in Florence, did business with England and thought of establishing an office in Flanders also. The work of Cœur survived him, and French commerce developed rapidly in the intervals of peace following. Great interest was felt in France in the explorations of the sixteenth century, and though the French were behind the Spanish and Portuguese in the work, they led the English and Dutch, and the names of Verrazano (an Italian in the French service) and Cartier testify to their energy.

270. The bulk of French commerce still with nearby countries. — France was still unprepared, however, to engage extensively in oceanic commerce. The chief part of its trade in the sixteenth century was with its immediate neighbors; it found the best market for its exports in Spain, and it sought a large part of its imports in Italy. French military expeditions to Italy about 1500 had far more effect at the time than the discovery of the New World or of the sea route to India; the Italians stimulated and gratified new tastes and introduced new methods in business. The best days of the Levant trade had passed away, but the number of French ships engaged in it increased rapidly, until the outbreak of the religious wars at home. France shared with Venice the profits of its trade, and was the first of the European states to secure from the Sultan at Constantinople a "capitulation" in the modern form, defining the condition on which foreigners could trade.

271. Decline during the period of the religious wars. — The promising development was checked by the religious wars of the later sixteenth century; France must endure a period of anarchy at home and powerlessness abroad. French commerce declined at its source, as production languished; and was attacked abroad by competitors and by the pirates who infested the coasts. About 1600 the French merchant marine had almost disappeared from the Atlantic; voyages to foreign lands had ceased, and even the coasting trade had passed into the hands of the English, Flemish, and Dutch. Marseilles still maintained relations with the Levant, but the French merchants there were being mercilessly bled by Turkish governors, and were being rapidly driven out of the market by the English and Dutch. France seemed actually saved from ruin by the few years of peace and good government given by Henry IV and his minister Sully.

272. Recovery after 1600. — The first three quarters of the seventeenth century, until the disastrous foreign wars of

Louis XIV, were on the whole a period of peace and progress, Under Henry IV taxes were low, the means of internal communication by land and water were restored and improved, and new industries were introduced. The revival of trade was shown in the prosperity of fairs. The great foreign minister, Richelieu, was interested mainly in questions of politics, and hampered the development of French resources by heavy taxes, but in some ways he continued the work of Henry IV. The English of this period called themselves "Kings of the Sea" and termed Richelieu a "fresh-water admiral"; French ships, afraid to refuse the English a salute and unwilling to accord it, sailed under the Dutch flag. Richelieu said, in the government newspaper, "France, bounded by two seas, can maintain herself only by sea power," and began the construction of a navy which would give confidence to the merchant marine.

273. Founding of commercial companies, and colonial expansion. — The revival of French commerce was evidenced by the incorporation of companies designed to trade with distant parts of the world, and by the encouragement and growth of colonization. The list of commercial companies founded, 1599–1642, including reorganizations, amounted to twenty-two, including in its scope Canada, the West Indies, Guinea, the west coast of Africa, Madagascar, East India, and the Malay Archipelago (Java, etc.). The government accorded great privileges to the companies, and the royal influence was exerted in every way to help them; men were forced even by intimidation to invest in them, and nobles were allowed to participate without lowering the dignity of their order. The colonies were likewise pushed by the force of the government; emigration was encouraged and discharged soldiers and poor girls were sent out by the government to further the growth of population. The number of Europeans in Canada was perhaps 2,500 in 1660, and increased to 10,000 in the next twenty years; a considerable number of French settled also in various islands of the West Indies. France stood next to Spain as a colonial power, measuring merely by the area to which she could lay claim.

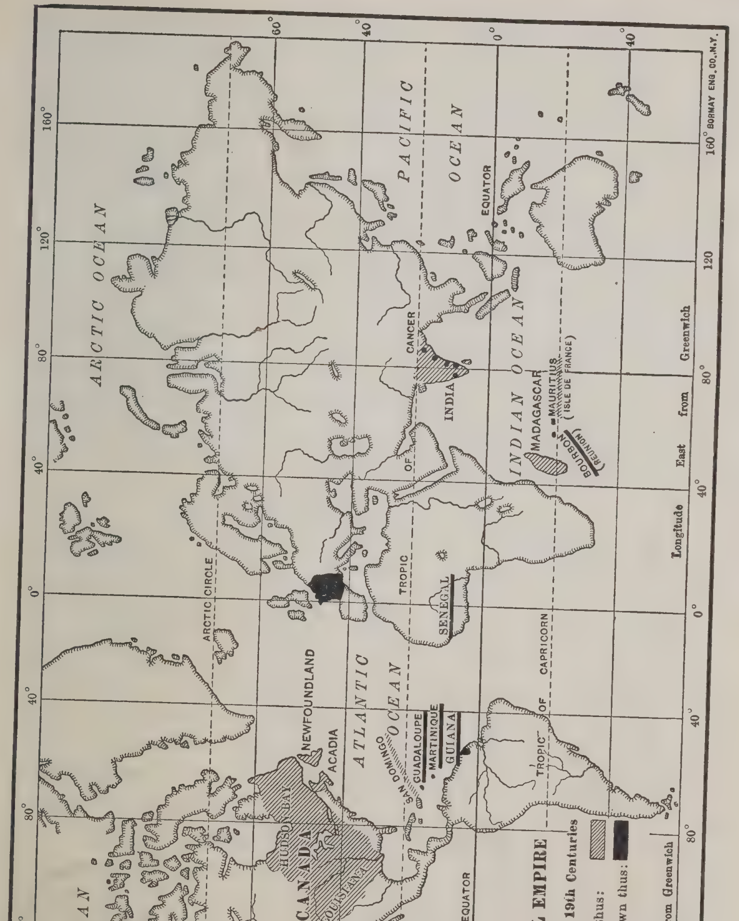
274. Reasons for the failure of these enterprises. — Most of these commercial and colonial enterprises were failures. They showed the characteristic faults of the time: inefficiency of organization, a failure to appreciate the difficulties of their task, and impatience in their attempts to solve the problems. They had special elements of weakness, moreover, in their rather artificial character, and in the fact that they carried with them abroad the class distinctions and prejudices of the home country. Still, the seventeenth century was for all nations a time of experiment in distant commerce and colonization; a large proportion of failures was natural, and the French had attained a sufficient measure of success before 1700 to have enabled them to enter the international competition of the eighteenth century with good prospects. Their prospects were blighted, and France lost its opportunity to become a "world-power" by the fault of the French political constitution, which put the interests of the people at the mercy of one man, the king.

275. Mistaken policy of Louis XIV. — The "Great Monarch," Louis XIV, did not lack good advisers. The philosopher Leibnitz proposed, at this critical period in French history when the country could choose to be either a land or a sea power, that it should select the latter alternative, and base its greatness on control of the sea and of commerce. He said that France needed peace at home to permit an expansion of its power abroad, where the richest prizes of power were to be had; and he urged the occupation of Egypt, to give France the control of trade to the Levant and the far East. But Louis thought that the French frontier was too near to Paris and saw tempting morsels of territory on the other side of it; he found the arrogance of the Dutch galling to his pride; he wanted to raze the Pyrenees by putting a French prince on the Spanish throne. He engaged, therefore, in a series of continental wars continuing nearly fifty years, which returned little or no gain in Europe, and destroyed the power of France in the other continents. Louis' policy prompted his biographer to a comment of sad significance, "The inhabitants of the several nations of Europe have scarce ever any interest in the wars of their sovereigns."

This sovereign found France vigorous and offering brilliant promises of development; he left her weighted with taxes and debt. A distinguished Frenchman said toward the close of this reign that a tenth of the people were reduced to beggary, and of the remainder over one half were in no condition to give alms, they were so near to beggary themselves.

276. Decline of the French colonial empire in the eighteenth century. — The colonial possessions which France surrendered to England at the close of the wars (the Hudson's Bay Territory, Nova Scotia, and Newfoundland) seem comparatively unimportant, but their loss was significant. The two countries had chosen different paths. England continued to build up a colonial empire; France continued to spend her resources in continental wars, at the cost of her commerce and her colonies. The Seven Years' War, ending in 1763, marks practically the end of the conflict. France surrendered all her possessions on the North American continent, and some of those in the West Indies and Africa; and abandoned forever the hope, at one time most promising, of building up an empire in India. So little were the colonies appreciated in France that some good Frenchmen rejoiced at their loss, and only wished that more of "those wretched possessions" might have been transferred, to ruin the enemy!

277. Growth, notwithstanding, in the commerce of France. — The reader must not infer from preceding paragraphs that French commerce was stationary or declining in the eighteenth century. Colonial expansion was often a long-time investment, from which a country could hope to recover the full return only after the lapse of generations, sometimes after the colony had established its freedom. The full effect of the French policy is apparent only in the nineteenth century, and



FRENCH COLONIAL EMPIRE

From the 17th to the early 19th Centuries

Territory Lost shown thus: ▨

Territory Retained shown thus: ■

elements which we have not yet considered must be taken into account to explain why France has been passed by other countries in the race for industrial supremacy. In the eighteenth century, in spite of a misguided foreign policy, in spite of burdensome taxes, and in spite of a vicious organization of internal trade and manufactures which will be described later, France profited by her size and resources to build up a great foreign trade. Some features of this trade will be apparent from the following table, to which the same remarks apply that have already been made on the subject of statistics. The figures show in millions of livres (and a rough equivalent) the trade of France with the various continents in 1716, when the country was just recovering from war and commerce was unduly depressed, and 1787, when a short period of unusually active trade preceded the French Revolution.

Commerce of France by Continents

	1716		1787	
Europe	liv. 176.6	$ 35.	liv. 804.3	$ 161
America	25.8	5.	269.9	54
Asia	9.2	2.	52.1	10
Africa	1.1	0.2	6.5	1
Total	214.9	43.	1153.5	230

278. Analysis of French commerce in the eighteenth century. — Without attempting to draw too much from figures which are known to be inaccurate, we can base on this table some few important conclusions. The commerce of France grew at a rate not far from that of England's in the eighteenth century. The commerce of France, however, continued in much greater degree to be European; the chief trade of the country was with its neighbors, Italy and Germany, and, after them, with England and the Baltic. To these countries France sent manufactures amounting to less than one third of the total exports (122 million), the remainder being made up of articles of food and drink and various other raw materials.

The failure of France to manufacture goods which would hold their own in the world market must be regarded as her vital weakness. We see it especially well illustrated in the trade with the United States. During the later years of the Revolution (1781–1783) France sent to the United States exports amounting to over eleven million livres a year. A few years afterward (1787–1789), when the restoration of peace should have stimulated the trade, it had dropped to less than two millions. The French had sent poor wares, and could not hold the trade when the English were free to compete again.

279. Value of the French sugar colonies. — It was the fortune of the French to keep of their colonies in America just those which were capable of the most rapid economic development. They were West India islands in which sugar was produced by slave labor. Comparatively few Frenchmen had settled in the islands, and in the long run they were to prove of little advantage to the home country, but in the eighteenth century they were veritable gold mines. The leading position in sugar production, which had first been taken by the Portuguese in Brazil, passed early from them to the English, and was taken before 1750 by the French, who soon controlled the European market. A part, also, of the imports from Africa comprised sugar from islands in the Indian ocean, while the African slave trade was exploited for the benefit of American planters.

QUESTIONS AND TOPICS

1. Striking characteristics and chief weaknesses of the political system of France. [Seebohm, Prot. rev., 40–46, 210–212; Cheyney, Eur. background, 115–121; Taine, Ancient régime.]
2. Effect of the Hundred Years' War (*a*) on the people, (*b*) on the power of the king. [Adams, Growth, chap. 9.]
3. Effect upon France of the religious wars, and the emigration of the Huguenots. [Adams, 180 ff., 227 ff.]
4. Write a report on the career of Jacques Cœur. [Encyc. Brit.]
5. Write a report on one of the French explorers. [Manuals of U. S. history and references; Thwaites, France in Amer., chap. 1: Parkman, Pioneers of France.]

6. Write a brief report on the history of the commerce of Marseilles. [Encyc.]

7. Reforms under Henry of Navarre. [Adams, Growth, p. 183 ff.; P. F. Willert, Henry of Navarre, N. Y., Putnam, 1893, $1.50, chap. 8.]

8. Reforms by Richelieu, 1624–1642. [J. B. Perkins, Richelieu, N. Y., Putnam, 1900, $1.50, chaps. 6, 9.]

9. Economic organization and commerce of the French in America. [Bateson in Camb. mod. hist., vol. 7, chap. 3; Thwaites, France, chap. 8; Parkman, Old régime, part 2.]

10. Make a written summary of the wars of Louis XIV, showing gains and losses of territory, in Europe and in the rest of the world. [Adam Growth, p. 216 ff.]

11. Opportunity lost by Louis XIV to build up an empire by sea power. [Mahan, Sea power, chap. 2, and pp. 141 ff., 198 ff., 219 ff.]

12. Prepare a written summary of the results of the French wars of the eighteenth century. [Adams, Growth, chap. 14.]

13. Prepare a graphic chart from the table of figures, sect. 277, as suggested above in the case of England, and study the conclusions to be drawn from figures and chart.

14. Combine the charts for England and for France, and draw conclusions from the comparison. Endeavor, if possible, by extending your reading, to settle the questions which this comparison will suggest. Note, however, that the figures refer to different dates, that they are a far less accurate index of the facts than you would suppose, and, finally, that the reduction to modern currency is very rough.

15. Write a report on the history and commerce of one of the following West India islands under French rule: (*a*) San Domingo, (*b*) Guadeloupe, (*c*) Martinique. [Encyclopedia; Homans' Cyc. of commerce; C. B. Norman, Colonial France, or Bryan Edwards' History, if that book is available.]

BIBLIOGRAPHY

Of the general works on French history, Adams, ** Growth of the French nation, is excellent.

Of the works on particular periods all the books of James Breck Perkins can be highly recommended for the attention paid to economic conditions; I refer above only to the small book on Richelieu. See the A. L. A. Catalogue for titles of others. Paul Lacroix, The XVIIIth century, London, no date, is a popular illustrated work, with a chapter on commerce, of no great importance. Books discussing the conditions leading to the French Revolution are valuable for the light they throw on the organization of France in the period of modern history. Books by Taine, E. J. Lowell, and R. H. Dabney will be useful in this connection; and vol. **4,** no. 5, of the Univ. of Penn. Translations (Typical Cahiers of 1789) is a convenient selection from sources.

A bibliography of French colonial history in America will be found in the Guide of Channing and Hart, in the Cambridge mod. hist., vol. 7, pp. 766–771, or in R. G. Thwaites, France in America, N. Y. Harper, 1905. The last named book is not so serviceable for purposes in view here as others in the same series; and the student will turn by preference to Cambridge mod. hist., vol. 7, chap. 3, where the subject of the French in America (1608–1744) is treated by Miss Mary Bateson, with due regard to economic interests. Of Parkman's works see especially The old régime, Boston, Little, 1902, $2. Norman, Colonial France, London, 1886, covers briefly the history of all the French colonies; the French West Indies are included in A. K. Fiske. S. L. Mims, Colbert's West India policy, New Haven, 1912, is a scholarly study of a particular topic.

CHAPTER XXV

FRANCE: POLICY

280. History of the French customs tariff. — After this survey of the development of French commerce we can gain an appreciation of the opportunities for still greater growth that were lost, by considering the obstacles with which the merchant had to contend.

First of all, as a matter of course, there was the customs tariff on the frontier. This went through the normal course of development in the period under consideration. The government attempted to reduce to some sort of system the scattered duties of the earlier period; and under the influence of mercantilist doctrines it ceased to use the duties chiefly for raising revenue. The idea of using the tariff to protect home industries, which was at first held vaguely and applied only occasionally, gained strength with time and was made by Colbert, a minister of Louis XIV, the chief point in the tariff system. In 1664, and again three years later, the duties were raised to protect home manufactures; duties were raised twofold and more, and when wares were found still entering the kingdom they were in some cases absolutely prohibited. The high tariff led to reprisals on the part of other countries, and strained political relations with them; it was one of the causes of open war with the Dutch. It remained throughout the period a serious obstacle to commerce with advanced industrial countries like England and Netherland; the breaches made in it by commercial treaties were comparatively unimportant; and smuggling formed in France as in England the real safety-valve of the commercial system.

281. Persistence of customs frontiers inside France. — Far more serious than the frontier tariff were the customs duties *inside* of France. The French kings had made their country by the political union of feudal fragments, and had never used their great power to abolish the evidences of former separation and to unify their territory for the purposes of commerce. We must distinguish three different sections of the country. The North, roughly speaking, was an area in which internal trade was free, *i.e.*, in which the provinces were not separated by customs barriers. The South, on the other hand, was composed of provinces "reputed foreign" which had kept their tariffs, so that trade here was not free, and wares passing between this and other parts of France had to pay duty. Still a third section was the East, "provinces foreign in fact"; these provinces did not form part of France at all, commercially speaking, for they were outside the national customs frontier, enjoying free trade with other countries and paying duties when they sent wares to other parts of France. If the reader will recall the economic evils that resulted in the Middle Ages from the separation of districts he will readily appreciate how much France lost by carrying over a medieval system to modern times. It was impossible for a district to make the most of its resources by specializing in production. A producer did not have France for a market; a consumer did not have France for his source of supply; each was bound by provincial restrictions.

282. Persistence of local toll barriers. — Still the picture is not complete. There were not only provincial tariffs inside of France but also local customs inside the provinces. Let us consider the case of a merchant of Paris who desired to export a package of cloth to England in the sixteenth century. He had to pay not only the national export duty, but also at *fifteen* places on the way down the Seine he had to pay local customs; at Rouen he must pay provincial customs; and we must add to his list of expenses freight, pilotage, etc. Wine carried from Bercy (near the Swiss frontier) to Paris, in the next century, had to pay sixteen different dues on the way to market. In the sixteenth century there were over a hundred tolls or customs on the Loire; in the next century there were still twenty-eight on the stretch from Orleans to Nantes; and some persisted till the French Revolution. Conditions improved in the course of time, as the above figures suggest, but improvement was obstructed by the opposition of local interests and retarded by the delay of the law; and the Revolution was needed to wipe away these remnants of the Middle Ages with many others.

283. Manufactures; the gild system maintained in spite of its bad effects. — Before we leave the commercial history of France in this period we must consider still another subject, the organization of manufacturing, to understand why the country did not make better use of its resources, and why it entered the nineteenth century handicapped in competition with a country like England. Three general topics will be considered: (1) the gild system; (2) the national regulation of manufactures; (3) the royal or privileged manufactures.

(1) The gilds which in England during this period gave place to a more modern and more efficient system persisted in France and even extended their influence. When the government was in want of money it found the gilds more convenient subjects of taxation than scattered artisans; for fiscal reasons, therefore, and not for any economic advantages, it encouraged and even compelled artisans to unite in gilds on the old model. The result was a rigid separation of allied trades and a complication of processes which would seem incredibly stupid to a modern merchant or to the head of a modern factory.

284. Separation of trades. — At Amiens there were nine distinct corporations, each with its specific regulations, engaged in the manufacture of woolens alone. Every gild watched jealously to see that another gild did not infringe on its petty field, and there was an interminable bickering among them over the question of monopoly. The quarrel of the goose-roasters and the poulterers lasted half a century, and went against the poulterers, who were restricted to the sale of uncooked game; but the roasters emerged from the conflict only to meet another foe, the cooks, who were flushed with a recent triumph over the gild of "vinegarers-mustarders" (who made sauces); and after another half-century the cooks succeeded in limiting the right of the roasters to sell cooked meat. This is an example of the conflicts which all the time absorbed the energy and the resources of people who were engaged in kindred lines of retail trade and manufactures; cobblers and shoemakers; old-clothes men and tailors; watchmakers and clock-makers; bakers and restaurant-keepers; and so on through a list that seems interminable. Some tradesmen had a specially long list of enemies. The mercers, for instance, who dealt in certain lines of dry-goods, in the course of a century had sixteen decisions of the supreme court (Parlement) in their conflict with the glovers; and fought also the "bonneters-cappers," and nearly all the other tradesmen whose wares they sold. The question, who had the right to make and sell buttons, rose nearly to the dignity of a question of state; search was made in private houses for illegal buttons, and private individuals were arrested in the street for wearing them.

285. Influence of the gilds in preventing technical progress. — Space is lacking for a description of all the evils that the gild system entailed on French industry in this period, and the reader is referred to the general discussion of the gilds in a previous chapter, with the assurance that all the evils there enumerated were well represented in France. We cannot leave the topic, however, without notice of the obstacles which the gilds put in the way of inventions and technical improvements. A coppersmith who devised a new helmet was set upon by the armorers; a hatter, who improved his wares by mixing silk with the wool, was attacked by all the other hatters; the inventor of sheet lead was opposed by the plumbers; a man who had made a success in print-cloths was forced to return to antiquated methods by the dyers. The gildsmen opposed not only new wares and methods, but also the use of machinery and production on a large scale. A Lyons silk-weaver could keep only four looms; a Lille serge-maker secured the right to have twenty looms, that he might carry on experiments looking to improvement of the manufacture, only by special privilege and against the vigorous protest of the city government. In spite of all opposition there was improvement, but the difficulties were so great that nine reformers must have failed where one succeeded. The history of the French gilds of this period is a history of wasted opportunities.

286. Narrow restrictions imposed on manufactures by the government. — (2) Industries were tied down not only by the narrow regulations of the gilds but also by laws of the central government. Every government believed in this period that it was unwise to let manufacturers follow their own ideas in all respects, to stand or fall according to their success in pleasing the public. Even England had an extensive system, prescribing the standards for the products of certain manufactures. The English system, however, did comparatively little harm, if it accomplished little good, while there can be no question that a similar system in France was carried so far that it was a serious check to industrial development. This excessive growth of government regulation was most marked under Colbert, the minister of Louis XIV, to whom reference has already been made as a leader in the extension of the protective tariffs; and the system continued throughout the period. Taking the cloth manufacture for an illustration, Colbert fixed by law, for each kind of cloth, the length and breadth, the dimensions of the selvage, the number of threads in the warp, the quality of the raw materials, and the method of manufacture. His instructions for dyeing contained 317 articles, to which dyers must conform. To fix responsibility and force compliance all cloth had to bear the special marks of the weaver, dyer, and finisher, the seal of the gild, and sometimes another mark. These regulations grew constantly more complicated; an official said in 1787 that the regulations on manufactures filled eight volumes in quarto.

287. Burden of these restrictions on manufactures. — There can be no question, either of the honesty of Colbert's intentions or of the energy he showed in carrying them out. He sent out agents everywhere to study industries and to talk with the manufacturers, that he might legislate to the best advantage. One man, however, cannot know a hundred businesses better than the men who are carrying them on. Colbert and his successors were ignorant of many points, were deceived in many others. The result was a mass of regulations of which many were utterly bad, injuring both producer and consumer. The regulation prescribing a minimum breadth for cloth would have killed an industry in one part of France that wove strips for flags, an industry in another part that could sell cloth cheaper by weaving so narrow a breadth that one man could tend the loom. These industries, after a tedious and expensive delay, secured exemption from the law; others, less fortunate, were destroyed. A manufacturer ran always the risk of having his wares confiscated, not because they were bad and people did not want them, but because they failed to conform in some point to hide-bound regulations. An official inspector, shortly before the French Revolution, said that in every week of years past he had seen 80 or 100 pieces of cloth, good except from the government standpoint, cut in pieces or burned because they were irregular. Even the French revolted at some of the regulations, and half of the laws were evaded with the connivance of officials.

288. Special privileges granted to certain manufactures; resulting abuses. — (3) While the government restricted in this fashion the natural development of manufactures, it granted not only exemption from its own rules but liberal grants of money taken from taxpayers to stimulate favored industries. This practice, begun in the sixteenth century, grew under and after Colbert. It enabled certain industries to expand as they would otherwise have been unable to do, and to reach the higher grade of organization which was coming as a natural growth in England. Unfortunately, however, the privileges went not to the most deserving but to the loudest and most adroit claimants. To gain the privileges, which included everything from exemption from taxes and handsome subsidies down to titles of nobility, the manufacturer did not need to show that he had some technical improvement to introduce; it was sufficient if he promised to bring in a foreign industry or even to extend one already in existence at home. The royal factories abused their power to raise prices to the consumers and to lower the wages of the laborer. Some of them came to be regarded as public calamities. They showed in general the characteristics of the hothouse plant, which cannot thrive unaided, and most of them failed after a longer or shorter career. We can say of them as of many other manifestations of the French policy of the period; some good may have resulted in ways unknown to us, but the evils are apparent, and justify us in calling the policy bad.

QUESTIONS AND TOPICS

1. The protective policy, as applied by Colbert. [Palgrave's Dict.; A. J. Sargent, Economic policy of Colbert, N. Y., 1899, chap. 4.]

2. Measure on a map the length of one or more of the stretches on which tolls were levied, sect. 282; estimate the average distance separating toll barriers; apply to a map of your own vicinity.

3. If you are familiar with the organization of some modern manufacture write an essay showing how efficiency would be impaired by insisting on the separation of allied trades. [The advanced student will find helpful and suggestive on this and similar topics, Bücher, Indust. ev., chaps. 6, 7, 8.]

4. Write a report on any instances known to you of bad results following the strict division of occupations among trade unions.

5. Write a report on any instances known to you of opposition to technical improvements, the introduction of machinery, etc., by modern trade unions.

6. Attempt of Colbert to establish regulations for manufacturers: object, methods, variety of regulations, results. [Sargent, Colbert, chap. 3.]

7. With what object and to what extent do governments now seek to regulate manufactures? [Farrer, State in relation to trade, London & N. Y., Macmillan, $1.]

8. Compare with the French the English experience with privileged manufactures. [Hewins, Eng. trade, chap. 1; Encyc. Brit., article Monopoly.]

9. Origin and early history of the modern system of patents for inventions. [Same references; Encyc., article Patents.]

BIBLIOGRAPHY

See preceding chapter.

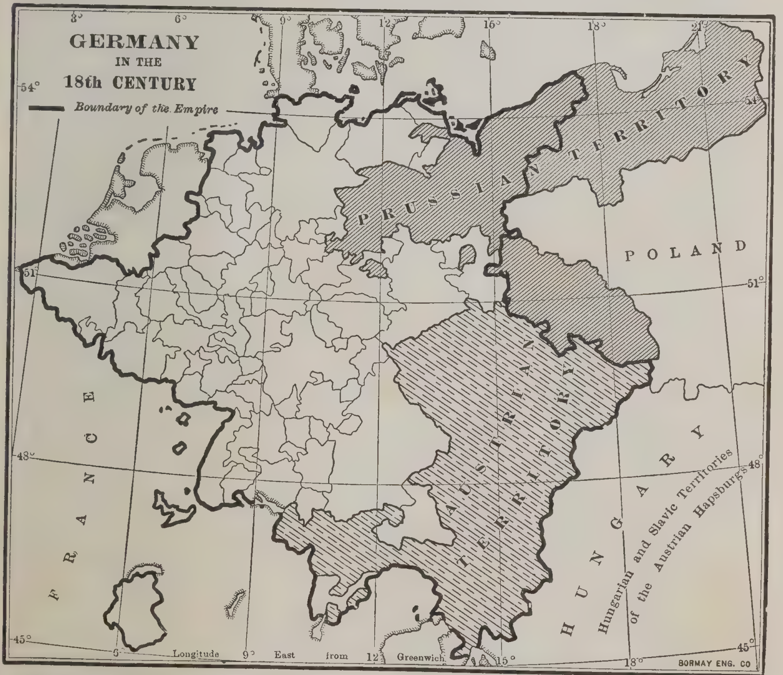
CHAPTER XXVI

THE GERMAN STATES

289. Political survey of Germany about 1500. — After considering a country in which the central government was, so to speak, too strong for the interests of commercial development, it will be instructive to take up countries in which it was certainly too weak, Germany and Italy.

Germany presented a striking contrast in its political and in its economic development at the beginning of the period, about 1500. In political organization, the central government had almost no power; it was the mere shadow of a reality. The real power rested in hundreds of petty states, of which some were but a few square miles in extent. There was no authority which could keep in order these little states and the different classes of people which composed them. The history of Germany in this period is a sad story of conflicts between classes, — peasants, burghers, knights, and princes; conflicts between Catholics and Protestants; conflicts between the states themselves. In these struggles the best energies of the Germans were absorbed; they were marking time or even going backward while the more fortunate peoples of Europe were advancing. The Germans learned at last to despair of realizing their dream of a national government. Not all parts of the country, however, were equally unfortunate; some came under the rule of princes who managed to build up a strong power at home and abroad. Two of these local states are of especial importance, for between them they have divided the fragments of the old Germany, and made great states in modern Europe. One of them, Prussia, is the nucleus of what we now call Germany. The other, Austria, which included the Germans of the South, added to them fragments of territory peopled by other races, and made the state of Austria-Hungary.

290. Development of the economic organization. — There was a contrast, it was said, between the political and the economic development. The very lack of a central power had enabled some of the sections and classes to advance rapidly by freeing them from control. In the fifteenth century the agricultural classes, who had been serfs in the Middle Ages and who were to be reduced again to serfdom later by the political oppression to which constant wars gave rise, were free and



The objects of the map are: (1) to show the possessions of the Hohenzollerns (Prussian) and Hapsburgs (Austrian); (2) to show the small fragments of which remaining Germany was composed. To preserve clearness, many of the smaller fragments are not indicated. Note that the Empire included some states not German (Flanders), and did not include all German states (East Prussia, Silesia).

prosperous. The cities were more rich and populous than those of any other country north of Italy. Not only had manufacturing and mining made rapid progress, but banking and commerce too. The Fuggers and the Welsers of southern Germany were great promotors and financiers, with interests extending over all Europe, from which they drew enormous wealth. German merchants showed the most enterprise and energy of any north of the Alps; they distributed among other countries of the Continent the Levant wares which they secured from Venice, and they controlled the commerce of the West of Europe with the North and East. We shall begin our sketch of the decline of German commerce by returning now to the history of the Hanseatic League, which we left in full control of this last branch of trade.

291. Condition of the Baltic trade. — The Baltic trade suffered in the period about 1500 from influences over which merchants had no control. The Protestant Reformation caused a decline in the demand for some of its staple wares: wax, which had been largely used for candles in church services, and fish, of which the consumption had been greatly furthered by the Catholic periods of fasting. The most valuable fish, moreover, the herring, ceased to enter the Baltic Sea, and by limiting their feeding ground to the North Sea enabled the Dutch to become leaders in the fishing industry. Imitation of Italian fashions in dress, with which the French became acquainted about 1500, caused less demand for furs. All these changes hurt the Baltic trade, but they were far from destroying it. This trade grew, in fact, throughout the period; it could afford to dispense with the luxuries of commerce for it controlled the necessaries, grain and meat, lumber and naval stores. The reasons for the decline of the Hanseatic League are to be sought not in the character of the trade but in the character of the League itself.

292. Decline of the Hanseatic League. — The League lacked organization. The many towns of which it was composed were so separated by physical distance and by divergence of interests that they could not cooperate efficiently. They were strong enough to crush other towns which sought to enter their field, but they were unequal to the contest with national states; and the political consolidation of the countries of northern and western Europe raised up enemies with whom they could not compete. In nearly twenty years (1476–1494) only one common meeting of delegates was held. Dissensions broke out inside the towns, and they began to quarrel among themselves. Lübeck, in the center, put forth claims opposed to the interests of towns on the edge of the League, on the lower Rhine and in Prussia. Rising commercial towns in the western part of the Netherlands, like Rotterdam and Amsterdam, grew up outside the League and in opposition to it. The turning-point in the decline may be put at 1535, when Denmark and Sweden were strong enough to break the Hansa's monopoly by opening the passage into the Baltic to the ships of all peoples. Soon other states were carrying the war into the enemy's country. Sweden threw the larger part of the Russian trade to the Dutch. The English built up a prosperous trade in the Baltic Sea and on the Arctic Ocean at Archangel. They flooded the German market with English cloths, and when the Hansa resisted, Elizabeth expelled the members of the League from England. In 1601 an Englishman could say of the Hansa towns: "Most of their teeth have fallen out, the rest sit but loosely in their head." Of the great League soon only three towns remained as Hanseatic members, Lübeck, Bremen, and Hamburg.

293. Decline of the commerce of south Germany. — While the cities of north Germany were losing their hold on a growing commerce, the cities of the South found a large share of their trade taken from them by the discovery of the ocean route to India. The German cities (Nuremberg, Augsburg, Ulm, etc.) fought with desperation to maintain their commerce, and proof exists that they carried on an active commerce with Italy after they ceased to obtain there the Oriental wares, and had to content themselves with Italian products. Even this trade, however, fell to a large extent into the hands of the Italians, who flooded southern Germany and drove native Germans out of business.

The Germans were not entirely unprepared for the changes following the discoveries, for they had long gone in considerable numbers to the Spanish peninsula, by land through southern France or from a French or Italian harbor to Barcelona. Many Germans had settled in Portugal, and for a time the great merchants of south Germany shared in the Indian trade at its source, in Lisbon. The great German financiers shared also for a brief period in the commerce of the New World. The Ellingers and Welsers leased the copper mines of San Domingo; the Crombergers had silver mines at Sultepeque; the Tetzels exploited the copper mines of Cuba. The Welsers founded Venezuela by a military expedition which they financed, and held the country for a few years.

294. The chief cause of decline of German commerce in this period was political. — The most obvious explanation of the failure of Germany to take a place with the other states in the commercial expansion following the discoveries is the disadvantage of her position. It has been said that the diversion of commerce to the oceanic routes exposed the countries of central Europe (Italy, Germany, etc.) to a condition of commercial glaciation, such as Norway would experience physically if it lost the warm current of the Gulf Stream. The difference in distance of a few hundred miles in voyages of thousands does not explain the matter. No physical differences suffice to explain why Amsterdam rose and why Hamburg fell so rapidly. The weakness of Germany was not physical. Nor was it economic; German merchants of this period had more free capital, more business ability and greater energy than the merchants of any other country. Germany's weakness was political. The payments which merchants and other Germans made in the form of taxes and loans to political authority did not form a single fund which could be used for furthering German interests at home and abroad. The money went to a great number of rival governments, and was consumed in their particular quarrels, not helping but actually hurting German business interests.

295. The natural outlets of commerce stopped by hostile states. — The political weakness of Germany enabled other states, now rising to power, to crumble off fragments of the country, in which they established a commercial policy hostile to German interests. Before long the mouth of every one of the large rivers which were the natural commercial outlets of the country had passed under foreign control. The Rhine was Dutch; the Weser Swedish; the Elbe Danish; the Oder Swedish; the Vistula Polish. Tolls hampered the passage of wares as effectually as though Germany were surrounded by a physical barrier on the sea side; and German ships almost disappeared from the ocean.

German commerce suffered especially by the rise of the Dutch to an independent position. So long as Antwerp was the great market of the Continent Germans traded freely with it, and through it to Lisbon. The substitution of Amsterdam for Antwerp was a most serious blow to German interests. The Dutch had very different ideas from those of the Flemish; they wanted to do all the trade themselves and to force other people to a position of commercial dependence on them. They made the lower Rhine practically useless for their rivals, raising the tolls sixfold and more, and thereby coming into a control of the trade as far as Frankfort on the Main.

296. The damage done by internal dissensions and by the Thirty Years' War. — Germany was not only cut off from the outside world by tariff barriers, but cut up inside by the tolls of cities and territories. Every city on a trade route wanted to make itself a "staple," *i.e.*, have all goods passing the vicinity brought there for taxation and for sale. Frankfort on the Oder, for instance, demanded that all boats passing down the river Warthe should come *up* to Frankfort before they could continue their journey down the Oder to Stettin. The cities of Stettin, Frankfort, and Breslau, all situated on the Oder, instead of using that river for peaceable exchange, made bitter commercial war on each other with tolls and prohibitions. Conditions grew still worse after the Thirty Years' War (1618–1648), a terrible conflict which, without exaggeration, cost Germany one hundred, perhaps two hundred, years of development. The physical means of transportation declined. On the Elbe, for instance, the dikes ceased to be repaired, the tow-path disappeared, the banks crumbled; and sand bars and snags became so common that navigation was difficult and costly. Tolls not merely doubled; they increased fivefold and more. Space is lacking for a description of all the evils; they were practically a reproduction of the conditions which happier states had left behind them five hundred years before.

297. Restriction of manufactures by the gilds. — German manufactures followed about the same course as that of the French which we have traced above. The gilds merited the term given them by an economist of the seventeenth century who said they were the "curse of Germany"; they seem to have been in some respects even more narrow than the French gilds. The same old evils reappear, but the reader must be asked to take these for granted and to direct his attention to some new aspects of the gild organization. Specially noteworthy are the obstacles put in the way of any man who desired to become a full member of a gild. Many gilds succeeded in making the exercise of the trade a family monopoly by the regulation that no man could become a master who did not marry the daughter or the widow of a master. One gild expelled a man because he had married a wife whose grandmother was alleged to have come from a shepherd's family; other gilds expelled members because they had ridden an executioner's horse or drunk with an executioner. A man had at best to pay very high fees to become a master, and this artificial restriction on the number of full members not only kept the ordinary workmen in a wretched position, but also raised the price of goods to the consumer.

The monopoly of the gilds became more oppressive all the time. Most of their money, except the considerable part they spent in carousing, they used in lawsuits and in quarrels with rivals. For miles around a German town the gilds permitted no competitors, and they made it a regular part of their business to hunt down and exterminate independent producers.

298. The eighteenth century marked by general depression, with some signs of improvement. — In Germany, in general, there was little improvement in conditions in the eighteenth century. The country was still intersected with tariff barriers. The Rhine was cut into four sharply defined parts, and the Elbe, by reason of tolls, had lost its trade in some wares of the first importance: steel, iron, copper, olive oil, wine, fish, etc. To the conflicts between cities there was still no end. The cities of southern Germany, weighted with taxes and surrounded by closed markets, declined still more in commercial importance. There were, however, some hopeful signs of progress. Two cities of the interior, Frankfort on the Main and Leipzig, were building up a business which rested not only on trade in wares but on dealings in bills of exchange, currency, commercial loans, etc. Beside the rise of these banking centers special importance attaches to the revival of commerce on the coast of the North Sea. Hamburg and Bremen seized the opportunity offered by the American Revolution and the European wars to which it gave rise to extend their trade as neutral carriers, and had soon passed their old rivals, the Dutch.

299. The rise of Prussia important mainly from the political standpoint. — Taking German commerce as a whole, we leave it in 1800 still depressed and sluggish. The picture would be incomplete, however, if nothing more were said. In one part of Germany there had been great activity for centuries; in the North and East, namely, where the ancestors of the present Emperor William II were building up the state of Prussia. This activity, however, was mainly political, and the history of it does not belong here; we can refer to it only as a most remarkable example of state-making, in which commercial and industrial interests were made subordinate to the establishment of a strong government over a united people. The Hohenzollern rulers did not succeed in making a rich state out of a group of scattered territories of which some were, in natural resources, among the poorest in Germany. They did make a strong state, which won for itself a place among the great powers, and later took the lead in unifying Germany.

There was a moment in the history of the Hohenzollerns when it seemed possible that they might anticipate the idea of William II: "Our future lies upon the water." If the Great Elector (1640–1688) had secured the Pomeranian coast of the Baltic or kept even Stettin, he might have realized the plans he held to turn Prussia into a sea power, with fleet, colonies, and transmarine commerce. Fortune fixed the interests of the state on land, however, and when a good Baltic harbor was secured later it was too late to change. Frederick the Great was urged, a century afterward, to direct his policy to the sea, and actually founded some companies for trade with the East, but the time had passed, or had not yet come, for the success of Prussia in oceanic trade.

300. Reforms in Prussia favoring economic development. — In regard to their internal conditions, however, the territories of the Prussian state enjoyed a great advantage over others in Germany. The obstacles to trade in the form of tolls and staples were removed when political interests did not require their maintenance. The tariff systems, enormously complicated and cumbrous, were revised. The growth of manufactures was furthered by attracting skilled artisans from other countries; and the city of Berlin received a great stimulus from the Huguenots who found a refuge there. Some of the worst abuses of the gilds were reformed, and manufactures were protected, as in France, by customs duties and by royal privileges. New methods were applied in agriculture, and new land was opened to settlement and cultivation; a large number of the laborers, however, still remained unfree. It would be easy to add many details, but in closing this section on Germany the reader is again advised that the important side of Prussian history in this period was political, not economic. Prussia was preparing herself for the work of unifying Germany, and to accomplish that work a strong government was needed rather than a rich people. The riches have come to Germany in our own time.

301. Contrast of Prussia and Austria. — Prussia was a state which started in the heart of Germany (near Berlin), and remained almost entirely German as it spread. Austria, on the other hand, was originally a territory on the southern border of the German people, the rulers of which managed by skill and luck to extend their power over fragments of adjoining peoples of a different stock, over Bohemians and other Slavs (relatives of the Russians), and over the Magyars or Hungarians (relatives of the Turks). These other peoples were behind the Germans in their industrial development; they had come into Europe later, had been less subject to civilizing influences and more exposed to internal quarrels and wars. Furthermore, the Austrian Germans were behind the other Germans, on whom they were industrially dependent in the sixteenth century. Germans from the North took their manufactures into Austria for sale, carried on the trade of Austria and controlled the mines of Austria.

302. Political factors hindering development of the lands subject to Austria. — The territories subject to the ruling family of Austria, the Hapsburgs, began the period, therefore, in a backward condition, and they had no opportunity throughout the period to catch up. Internal trade was hindered not only by the national diversity of German, Slav, and Magyar, but also by the persistence of provincial tariffs, which underwent no important reform until nearly 1800, and which were not abolished even then. Austria did not suffer so much as Germany from civil war, but like Germany went through the crisis of the religious wars, which nearly ruined Bohemia; and had a plague of its own in resisting the advance of the Turks from the Balkan Peninsula. Austria suffered like France, moreover, from an absolute government which too often used the national resources in the interests of the royal family and not in the interests of the people as a whole.

303. Slow progress of industry and commerce. — It is, therefore, not surprising that in 1700 Austria stood commercially in about the same position it had occupied two centuries before. The country exported the raw products of industry, wool, flax, linen, hides, copper, etc., and received them again after they had been manufactured by other peoples. An economist of the time said that the total manufactures of Austria were not equal to those of a single Dutch city like Leyden. Even this small amount of manufacture was controlled by gilds, and suffered from the characteristic faults of the gild system.

In the eighteenth century, however, the government began to appreciate the importance of national commercial development. It fought the claims to monopoly put forward by the gilds, and encouraged manufacturers to extend their business, by premiums and privileges, as in France and Prussia. Austrian iron and steel wares made a place for themselves in commerce; the cloth industry of Bohemia, once ruined by war, revived again under the factory system; stockings, glass, porcelain, etc., were produced in increasing quantities.

304. Attempts of the government to stimulate development. — The government stimulated the development of manufacture by its customs tariffs as well as by its internal policy. The duties on articles which the government thought could be made at home were raised rapidly, especially after 1700, and became in many cases prohibitory. Undoubtedly the growth of manufactures was furthered by this policy, though many industries betrayed the weakness of their origin by failing after a short period of apparent prosperity. The tariff gave rise, however, to much smuggling and corruption, and injured greatly some parts of the country: the Tyrol, which lies between Italy and Germany and had prospered on the transit trade;

and sections like Hungary which produced only raw materials,

To atone in some measure for these necessary results of a protective system, the government attempted also to extend aid to foreign commerce. Triest and Fiume were made free-ports, *i.e.*, they were put on the outside of the tariff frontier to attract trade. Venice was forced to renounce her claim to the exclusive right to navigate the Adriatic, and commercial treaties were made with Turkey, Russia, and states in northern Africa. Consuls were sent out to represent Austrian interests in foreign counries, and attempts were made to secure a share even in the trade with India.

305. Austrian commerce still backward in 1800.— Still Austrian trade attained no great development. The government which gave with one hand took with the other. Special privileges did not make up for the general weakness of the productive organization. Rulers complained that in spite of all their efforts commerce languished. Most of the foreign trade was absorbed by five companies, which divided the field. Two of them were limited locally, trading with Turkey and with Asia Minor respectively; while the other three traded in special wares with various countries. One imported colonial wares like sugar; another exported linens; while the third exported various raw materials to Italy, France, and Spain. During the wars beginning in 1776 Austrian merchants attempted to build up a trade with North America, and an agent of the government was installed at Philadelphia in 1783, but during the following years of peace Austria had no chance of success in competition with trade rivals.

QUESTIONS AND TOPICS

1. Write a report on the political constitution of Germany at the end of the Middle Ages, and the resulting conditions. [Baring-Gould, Story of Germany, chaps. 46, 52; Seebohm, Prot. rev., 26–33; Janssen, Hist., vol. 2, book 4, chap. 1; Freytag, Pictures, XVIIIth cent., vol. 1, chap. 4.]

2. Development of business and business methods at the beginning of the period. [See above, chap. 18; Cunningham's chapter on Economic

change in Cambridge mod. hist., vol. 1; Janssen, Hist., vol. 2, book 3, chap. 3; Freytag, Pictures, XVth cent., vol. 1, chap. 10.]

3. Condition of manufacturing. [Janssen, Hist., vol. 2, book 3, chap. 2.]

4. Condition of agriculture. [Janssen, Hist., vol. 1, book 3, chap. 1.]

5. Decline of the Baltic trade. [Zimmern, Hansa towns, period 3.]

6. Decline of the Hansa in England. [Zimmern, 324–353]

7. Write a brief report on the commercial history of (*a*) Nuremberg, (*b*) Augsburg. [Encyc.; Guide books of south Germany.]

8. Class conflicts, political and economic troubles about 1500. [Seebohm, ** Prot. rev., 136–140; Janssen, Hist., vol. 4, book 7; Frank Goodrich, * A social reformer of the fifteenth century, Yale Review, Aug., 1896, 5: 168–181.]

9. Do the Germans control the mouths of all the rivers mentioned in sect. 295 at the present time?

10. Write a report on the effects of the Thirty Years' War, from the economic and commercial standpoint. [S. R. Gardiner; Thirty Years' War (Epoch Ser.), N. Y., 1874, 217–221; Anton Gindely, Hist. of the Thirty Years' War, N. Y., 1884, vol. 2, chap. 11; Freytag, Pictures, XVth cent., vol. 2, chaps. 3, 5, 6.]

11. Write a brief report on the commercial history of one of the following towns: Frankfort on the Main, Leipzig (or Leipsic), Hamburg, Bremen. [Encyc.; Homans, Cyc. of commerce, for the early nineteenth century.]

12. Effect of the protective tariff in building up the Prussian silk industry. [Schmoller, Merc. syst., pp. 81–91.]

13. Indicate on a sketch map of Austria-Hungary the spaces occupied by the following peoples: Germans, Bohemians, Ruthenians, Hungarians, Southern Slavs. [Atlas, Encyc.]

14. The wars with the Turks: how long did they last; how far did the Turks penetrate Europe; what was the effect on industry? [S. Whitman, Austria, N. Y., Putnam, 1899, $1.50, chap. 16; E. A. Freeman, Ottoman power in Europe, London, 1877, chaps. 4, 5.]

15. Reforms in Austria in the eighteenth century, and their effect. [L. Leger, Hist. of Austro-Hungary, N. Y., Putnam, 1889, 379 ff., 388 ff.].

16. Write a brief report on the commercial history of Vienna. [Encyc.]

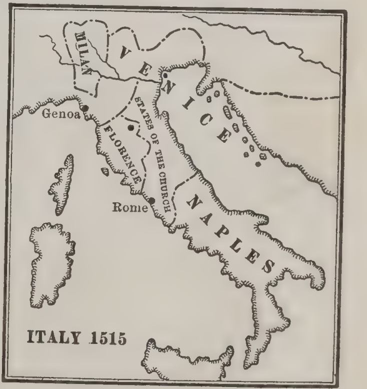
BIBLIOGRAPHY

Writings in German are voluminous; English books on the history of the period are concerned almost entirely with political affairs. The translation of Janssen's * History, St. Louis, Herder, 1897 ff., can be recommended for the beginning of the period, and Freytag's * Pictures of German life, London, 1862, contains some readable and useful descriptions.

CHAPTER XXVII

ITALY AND MINOR STATES

306. Political condition of Italy in the modern period. — In the history of Germany we have seen the fate of a country that entered the modern period lacking a political organization that would enable it to hold its own in competition with rivals. The history of Italy in this period presents the same conditions and the same results. At the end of the Middle Ages there were five important states in the peninsula: Milan, Venice, Florence, Rome, and Naples. None was strong enough to unite the country; each was strong enough to prevent another from reaching that end. The border territory of Savoy, whose rulers have united the peninsula in recent times, resolving, in the words of one, to "treat Italy as an artichoke, to be eaten leaf by leaf," counted as yet for little. The quarrels of the Italian states invited interference by stronger neighbors, Spanish, French, and Austrian; and Italy became the prey of adventurers and tyrants who lived as parasites on the resources that should have nourished industry and commerce.



307. Position of Venice at the beginning of the period. — Venice, which had enjoyed the commercial primacy among the Italian states, saw in the Portuguese discoveries a threat to her prosperity which only the strongest measures could avert.

There was no physical reason why Venice should not adopt the sea route to India, and, if necessary, fight with the Portuguese for the Indian trade at its source. All her traditions, however, pointed the other way; all her investments were tied up in the route through Egypt; and, most important, all her resources were required in the Mediterranean. The island city had been drawn into an expansion on the mainland which involved her in continental intrigues and sapped her strength at sea, at the very time when her sea power was of the greatest importance; the navy of the Ottoman Turks was rapidly developing and the scourge of the Barbary pirates (from the Mediterranean coast of Africa) had begun.

308. Blows at Venetian trade both by sea and land routes to India. — For a moment Venice halted undecided between the two routes. Venetian ambassadors were especially instructed to procure maps, letters from voyagers, and all other information that would help the home government determine its policy with respect to the recent developments. Venice made repeated attempts to buy from Portugal the right to dispose of all the spices brought to Lisbon, a proposition that naturally was declined. Venice had to buy in small lots, on what terms the Portuguese chose to set; more and more silver flowed from Italy to Lisbon, and it became increasingly difficult to get spices in Venice. Meanwhile the government was sending explorers eastward, in the hope of opening one of the old routes to trade, and seriously considered for a time the piercing of the Suez isthmus with a canal. Venice found the Ottoman Turks favorable to trade through their dominions, but had not the strength to maintain her old commercial connections when Cairo was finally captured by the Turks in 1517.

309. Relative decline of Venetian commerce. — From this time the energies of Venice were absorbed in an unequal conflict with the Turks in the eastern Mediterranean. Venice had prepared herself in a measure for the Turkish advance, by removing her chief staple from Alexandria to the island of Cyprus, but this too was lost in 1571 after a heroic defense.

The battle of Lepanto and others following it were empty victories; on the east coast of the Mediterranean Venice had to surrender, and consent to trade on the terms which the Turks imposed. Trade was still maintained. Aleppo became in the later period a market in which the Venetians had great establishments, drawing thence the wares that came by caravan from Bagdad, Persia, and India. Venice herself became constantly more beautiful, and was in the seventeenth century, as now, one of the show-places of Europe, where foreign visitors flocked by thousands. Her manufactures of glass and silk and many artistic luxuries remained unexcelled. It is, however, by quantity and not quality that we measure the greatness of a state's commerce; Venetian trade scarcely entitled the city to a place even in the second rank of commercial states, when it finally lost its independence in 1797.

310. Decline of commerce and industry in Tuscany. — The history of decline in other parts of Italy must be dismissed more briefly. Florence, which at the beginning of this period ranked next to Venice in manufactures, trade, and banking, found the markets of northern Europe closed by the Dutch revolution, by the religious wars and by the tariff barriers of the protective policy. Bankruptcy became frequent in the latter part of the sixteenth century. The woolen manufactures of Florence, which, it is said, employed 30,000 men in 1338, employed 971 in 1767. Hampered not only by weakness abroad but also by restrictive legislation at home, the Tuscan people declined to poverty and indolence. Prosperity was to be found in only one spot, the city of Leghorn, which had been made a free port; but this city prospered just because it had been placed on the outside of Tuscany, and the riches amassed there went largely into the hands of foreign residents.

311. Decline in other parts of Italy. — South of Tuscany conditions grew still worse. The Roman territory had never been of commercial importance, and the Neapolitan territory lost in this period what prosperity it had once had. Under a Spanish government, which was almost incredibly bad, the national resources were wasted abroad while Turks ravaged the coast, kidnapping slaves, at home; and the producing classes were crushed by heavy and unfair taxes.

North of Tuscany conditions were little better. The report of a commercial agent who was sent by the Austrian state to investigate upper Italy in 1754 shows commercial weakness everywhere. The country was divided by tariff barriers into a great number of distinct territories, of which scarcely any were large enough to give play for the development of industries which they were endeavoring to protect. The forces of industry and commerce were scattered and lost among a great number of small towns, and trade was largely controlled by foreigners, both Jewish and Christian.

312. Conditions in the Scandinavian countries. — It would be unprofitable to attempt here to trace the course of commerce in all the other states of Europe during this period, and this part of the book will close with a brief description of commercial conditions in the North and East. The districts included in Scandinavia are already familiar to the reader as forming an important field for the Hanseatic trade in the Middle Ages. The population was sparse, industry was undeveloped, towns were few and small; the knowledge and capital necessary for an active independent trade were lacking, and people were content to stay at home and let foreign merchants come to them with manufactures and take away their surplus products. The iron industry of Sweden, favored by rich ores, extensive forests for fuel and abundant water power, attained considerable importance; but the exports continued in general to be raw materials, especially those used in food and for ship building. Governments attempted to hurry the development of their peoples by protective duties and by the founding of commercial companies, with slight success. Gustavus Adolphus, a king of Sweden in the seventeenth century, formed the bold project of making the Baltic "a Swedish lake," by control of the entrance and the coasts, but his successors proved unable to maintain the position which he won. The keys of the Baltic fell into the hands of Denmark, and that country made a good profit by collecting tolls on the flow of a trade to which it contributed little itself.

313. Rise of Russia to a position among the European states about 1700. — Russia was even more backward than the Scandinavian states. Like them it had been dependent on the Hanseatic merchants for its commerce with western Europe, and remained passive after their fall, accepting what wares reached it overland or through the port of Archangel on the Arctic coast, whither English and Dutch shippers ventured. Until Peter the Great opened his "window on the West," by the founding of St. Petersburg on the Baltic about 1700, Russia was hardly a European state. Peter attempted, with remarkable energy, to bring Russia to the European standard in commerce and industry as well as in politics. He reformed, though he did not abolish, the system which gave the Czar a monopoly of trade in the most important wares; he revised the tolls on trade; he sent young men abroad to study commerce, and tried in other ways to elevate the merchant class. Peter did not succeed in his attempt to free Russian commerce from its dependence on western merchants, and his attempt to build up a merchant marine was a failure. In the East, Russian commerce fared better. Occasional caravans had gone before this from Siberia to China. The Czar now sent on his own account caravans which consumed three years on the long trip from Peking to Moscow; and individuals developed the trade which the crown had stimulated.

314. Character of Russian commerce in the eighteenth century. — Russia could be regarded in the eighteenth century as a European state. It belonged, however, to the Europe of the Middle Ages rather than of the modern period. Most of the population, including even the few who were occupied with manufacturing, were serfs. The people as a whole were on a low standard of living, and were densely ignorant. Commercial law was undeveloped, and trading practices were those of a half civilized community. The government interfered with exchange by arbitrary and vexatious restrictions. The country could export, with rare exceptions, only raw products. From China it imported tea, silk, gold, jewels, etc., of which only a part was kept at home; while it was dependent on western Europe for most of its colonial wares (sugar, coffee, spices, and drugs), and for all the finer manufactures (textile, metal, pottery, paper, etc.).

QUESTIONS AND TOPICS

1. Condition of Italy about 1500. [Seebohm, Prot. rev., 21–26. with sketch-map.]

2. Venice about 1500: commerce, government, policy on sea and land. [Horatio F. Brown, Venice, chaps. 16, 17; or Cambridge mod. hist., vol. 1, chap. 8, by the same author.]

3. Contest of Venice with the Turks. [Brown, Venice, chap. 19.]

4. Decline of Venetian commerce. [A. H. Lybyer, The Ottoman Turks and the routes of Oriental trade, English Hist. Rev., Oct., 1915, 30: 577–588.]

5. Attempt of Gustavus Adolphus to make of Sweden a great power. [Encyc. Brit., Gustavus II.]

6. Social and economic conditions in Russia about 1700. [W. R. Morfill, Story of Russia, N. Y., Putnam, 1900, $1.50, chap. 13; H. M. Thompson, Russian politics, N. Y., 1896, chap. 2.]

7. History of Russia in the eighteenth century. [Manuals of European history; Thompson, chap. 3.]

BIBLIOGRAPHY

Aside from fragmentary sections in the current manuals the reader of English will find little literature available on the history of commerce in the minor states. Such suggestions for collateral reading as are given above will probably satisfy the needs of students who are not sufficiently advanced to use foreign languages.

TOPICS FOR REVIEW

After covering the history of commerce in different countries the student will find it profitable to review certain general topics, piecing together what he has learned of their local history and endeavoring to get a clear conception of the general development. The following are suggested for study in the modern period (1500–1800): (*a*) shipping; (*b*) transportation on roads and rivers; (*c*) production and exchange of foodstuffs; (*d*) production and exchange of textile materials (flax, wool, cotton, silk); (*e*) production and exchange of finished textiles (linen, woolen, cotton, silk); (*f*) production and exchange of iron; (*g*) development of the system of manufactures (gild, domestic and factory systems); (*h*) development of banking; (*i*) effect of wars on the commerce of different countries; (*j*) European colonial systems; (*k*) commercial policy; (*l*) trade of Europe with Asia; (*m*) trade of Europe with North and South America.

PART IV. — RECENT COMMERCE

CHAPTER XXVIII

COMMERCE AND COAL

315. Statistical survey of development since 1800. — In entering the nineteenth century the student approaches the period in which commerce has achieved the most notable progress. Great as former advances may have seemed to the people in whose time they occurred, these sink almost to insignificance when compared with the growth of commerce since 1800. A recent estimate by a German author pictures the progress of the export and import trade of the commercial countries of the world as follows, in milliards of marks (roughly, units of 250 million dollars): 1700, 0.5; 1750, 1.0; 1800, 6; 1850, 17; 1899, 76. Some of the striking features of recent growth are shown in the following table. It is necessary, however, to warn the student that these figures, especially those for the earlier part of the century, can be regarded only as approximations to the truth. It may not be out of place, further, to advise the student to turn to the end of the chapter for suggestions as to the best way of studying the figures.

316. Great growth of foreign commerce. — Assuming, for purposes of discussion, a fair degree of accuracy in the figures, some conclusions from them may be pointed out. The commerce of the world increased in this century at the astonishing rate of 1,359 per cent. We have before encountered instances of remarkable commercial expansion, in particular countries, but we must bear in mind that the figures here are supposed to include the whole world, the backward as well as the progressive countries, the many millions in the interior of great continents who scarcely trade at all, and the Chinese, perhaps in themselves a quarter of the world's population, who trade still to but a slight extent. Clearly the growth of commerce in some countries must have been enormous to raise the total figures to the point at which we find them.

FOREIGN COMMERCE AND PRODUCTION OF THE COUNTRIES OF THE WORLD

Year	Aggregate Commerce Thousand Million Dollars	Per Capita Commerce Dollars	Coal Production Million Tons	Pig Iron Production Million Tons
1800	1.4	2.31	11.6	0.8
1820	1.6	2.13	17.2	1.0
1830	1.9	2.34	25.1	1.8
1840	2.7	2.93	44.8	2.7
1850	4.0	3.76	81.4	4.7
1860	7.2	6.01	142.3	7.2
1870	10.6	8.14	213.4	11.9
1880	14.7	10.26	340	18.0
1890	17.5	11.80	466	27.2
1900	20.1	13.02	800	40.4
1910	33.6	20.81	1,141	65.8
1913	40.4	24.47	1,443	77.4

317. Increase in the relative importance of commerce. — Not less striking than this growth in absolute quantity, as measured in current values, is the growth compared with the estimated increase of the world's population. The value *per capita* ("by head") of a country's commerce is secured by dividing the total amount of trade by the number of inhabitants; it shows the average share of each person in commerce, and furnishes, therefore, some index of the relative importance of commerce in different times and places. Now, even if this value *per capita* had remained the same we should regard the absolute increase in commerce as a very important fact. Commerce, however, has actually increased much faster than population; the share of the average human being in the world's trade has grown over tenfold. Let the student reflect on the difference it would make to him whether he had $2 or $20 for spending money in a given time, and consider the extra articles he could buy with the larger sum; he will then be better able to appreciate the broadening and deepening of the commercial current in recent times.

318. The world now passing through a commercial revolution. — The student is now in a position to understand the significance of the statement of an English writer, that "the commerce of the world may almost be said to be the creation of the past seventy-five years." We are living in the midst of a vast, though silent, revolution. Reference to the figures will show that the process of change quickened strikingly in the latter half of the century, and at its close we still do not dare to say when the movement will slacken. The change which we find so marked in commerce affects equally other sides of human life. An American author, Adams, writing in 1871, could say with truth that "the discoveries of Guttenberg and Columbus have produced more startling and more clearly defined results upon the destinies of the human race within the last twenty-five years than in any other equal period of time during the four previous centuries." Have the results been less startling in the quarter-century that followed? Another American economist, Wells, said about 1890, "When the historian of the future writes the history of the nineteenth century he will doubtless assign to the period embraced by the life of the generation terminating in 1885 a place of importance, considered in its relations to the interests of humanity, second to but very few, and perhaps to none, of the many similar epochs in time in any of the centuries that have preceded it." Is the generation terminated in 1905 willing to admit that it takes a less important place in history than its predecessor?

319. Share of modern countries in the commerce of the world. — It is unnecessary, I hope, to say more to impress upon the student the fact that a period of great change in the world's history, which began half a century ago, still continues; and that the coming generation will be called upon to carry on this change, and guide it for the welfare of humanity in the future. Leaving, therefore, general discussion and speculation, and returning to the concrete and well-defined facts that form the subject of our study, I insert in this place, as likely to be of use for reference later and of interest now (though not deserving painstaking study as yet), a table showing the share of different countries in commerce about 1900.

Recent Trade of Leading Commercial Countries

(Approximate annual averages in millions of dollars, special trade)

	1891–1900		1901–1910		1912
	Imports	Exports	Imports	Exports	Percentage of total general trade of world
United Kingdom....	1725	1190	2525	1700	16.6
Germany...........	1140	880	1800	1470	12.9
United States.......	780	1050	1185	1655	9.9
France.............	835	710	1065	995	9.0
Holland *..........	660	550	1020	835	6.9
Belgium *..........	362	309	578	453	4.2
Austria-Hungary....	302	337	464	459	3.3
Russia *...........	276	339	386	503	3.5
Spain*	177	172	201	185	1.1
Italy	255	219	480	343	3.1

* Figures are averages for the decade 1900–1909, not 1901–1910.

A similar statement, showing the relative rank about 1850, would present only one very striking change; France held at that time the place second to that of the British Empire, and Germany came after the United States.

320. Possible explanations of recent commercial development. — One topic of prime importance demands our attention as we enter on the study in detail of the commerce whose growth has been sketched above. What were the causes of this great commercial development? When we know them we shall truly understand the commercial history of the past century, and shall be prepared to face the problems of the present and the future.

The topic will be discussed under the heads which have been employed previously in similar discussions. The advances have been achieved either by a gain in the power of man to control nature and natural forces (technical progress); or by the more efficient cooperation of men in business (industrial and commercial organization), or in politics (political organization, domestic and foreign policy).

321. Prime importance of technical factors, especially the use of coal. — Hard as it is to disentangle these different factors, all of which have contributed much to the recent progress of the world, there need still be no question which has been of the leading importance during the nineteenth century. This century has been the great era of material invention, of scientific discovery, and of the increase in power of man over nature. Technical progress, therefore, is the first subject to be studied.

Again, there need be no question as to which feature of technical progress holds first place. Electrical appliances? Machinery? The steam-engine? Applied chemistry? All those things, with the vast benefits which they confer on humanity, rest now on practically one basis: coal. Vegetable matter of past geological ages, that has become fossilized, has undergone mysterious chemical changes and has shrunk to one tenth of its former bulk, furnishes now, after hundreds or thousands of centuries, the means by which we maintain and develop our material civilization and our great commerce.

322. Power in coal. — Coal offers men what all men seek, power. There is "spring" enough in it, when properly applied, to raise a million times its own weight a foot high. A man who sends a horse and cart to fetch a ton of coal, occupying four hours on the way, secures a power in the coal theoretically 2,800 times that expended in bringing it; and can probably get from it an amount of useful force exceeding by 100 times or more that of the horse employed in carting. A few decades ago (1865), when the output of coal was far less than it is now, an English economist calculated that forests of an area two and a half times as large as that of the United Kingdom would be required to furnish even a theoretical equivalent of the annual coal produce; practically, of course, the use of wood for an equivalent is out of the question. It was estimated, somewhat later (before 1880), that if the whole area of England were good land, devoted solely to raising forage, it would not support a horse-power equal to that obtained from the English coal mines; and that an area perhaps ten times as large would be required for the mere food supply of human beings of equivalent force.

323. Dependence of modern industry on coal. — It would be a great mistake to consider coal necessary now only in its most common application, that of generating steam for engines. The chemical industry depends largely, though not entirely, on the heat obtained from coal, to break down its raw materials and build up its finished products. Metallurgical industries would shrink almost to infinitesimal proportions if they were denied the use of coal. It has been estimated that the manufacture of a ton of pig iron requires the use of two tons of coal or more; while an equal quantity of steel requires six to eight tons. Still, the use of coal for the steam-engine is undoubtedly its most important application; and we can gain some conception of the place that coal has taken in the world's economy by considering the growth of steam power. ✓

324. Importance of coal, estimated in steam horse-power. — A horse-power, the technical unit adopted for measuring the working capacity of an engine, is for practical purposes equal to the force that can be got from several (perhaps three) horses, or from a number of men variously estimated at ten to twenty-four. Now in round numbers the steam horse-power of the world was a million and a half in 1840, and had increased, at the end of the century, to *fifty* times that amount. A simple operation in arithmetic will show the amount of work, in human equivalent, now done by steam. Taking, for example, a modern country, Germany, we find engaged in industry and transportation slightly over ten million people, while we find engaged beside them another population of mechanical iron slaves (steam-engines), variously estimated as equivalent to one hundred to two hundred and fifty million people. These slaves cost for food (coal), attendance, doctor's bills (repairs), and burial expenses (including the cost of replacing them once in twenty-five years), only about $2.50 a year apiece. Admit some exaggeration in the figures, and still the contrast with the cost of human labor is most striking.

325. Technical history of the steam-engine. — The steam-engine has been in practical use in Europe since about 1700. The earliest engines, however, seem ludicrously crude now, and could be used only for pumping water. Progress was slow until the last part of the eighteenth century, when James Watt introduced improvements (separate condenser, double-acting piston, use of cut-off, etc.), which greatly increased the efficiency of the engine, and caused a gradual extension of its use from mining to manufactures. The introduction of the non-condensing, high-pressure engine about 1800 prepared the way for the use of steam on railroads. The compound engine, in which the steam passes through two or more cylinders before it is allowed to escape, was invented about the same time, though it was not brought into general use until about 1850. Since then improvements in details of the engine and in the form of boilers have enhanced still further the efficiency of steam power, until it now produces about two thirds of the work possible under ideal conditions. Practical engineers expect now no rapid progress or startling changes. Some measure of the progress achieved is furnished by the fact that Watt's engines required ten pounds of coal an hour for each horse-power, the engines of the next generation required five, while the best modern engines require but one and a half, or, in rare cases, one.

The previous paragraph referred to the reciprocating engine in which the piston moves constantly forward and back. Since rotary motion is the form in which the power is commonly transmitted and applied, it would be desirable to get the motion in this form originally, and many attempts have been made to make rotary engines. Success has been attained in the case of the steam turbine, in which jets of steam strike against the blades of a turbine wheel, and cause it to revolve. Originally applied by Dr. De Laval of Sweden to operate the centrifugal cream separator which he had devised, it has come into common use for the generation of electricity and for the propulsion of ships. While the steam turbine has proved its efficiency for special purposes it is less adaptable than the old form of reciprocating engine, and still leaves to that the larger part of the field.

326. The internal combustion engine. — In the ordinary power plant there are two units, the boiler in which steam is generated, and the engine in which the steam is put to work. An internal combustion engine is designed to burn the fuel in the engine itself. This is practicable when the fuel is a gas or a liquid whose vapor will unite with the oxygen of the air to form an explosive mixture. The internal combustion engine offers several advantages over the steam power plant: it uses more effectively the heat that is generated, it is less bulky, it is more easily tended. In spite of characteristic disadvantages, particularly the need of an auxiliary starter, and restricted flexibility as regards speed and power, the internal combustion engine has proved indispensable. In large units it serves the steel mills, which put the waste gases from their blast furnaces to work, and in its application to the automobile it has effected a revolution in transportation and travel. Although in the manufactures of the United States in 1914 the internal combustion engine still accounted for less than 5% of the total horsepower, the aggregate horsepower of the gasoline engines of automobiles has since that time considerably exceeded the total horsepower from all sources employed in manufacturing industry.

QUESTIONS AND TOPICS

1. Do not attempt to remember *any* of the figures in sect. 316, unless possibly the first two of the last line.

Prepare a graphic chart in the following way. Lay off the time periods on the horizontal line at the bottom of your paper, and on the perpendicular, near the right-hand margin, lay off the figures of the last line of the table. This will insure space in the chart for all the lines. Divide the perpendicular into, say, forty units. Each unit may then be made to represent: 1,000 million dollars of value; $1 per capita; 40 million tons of coal; 2 million tons of iron. Indicate the figures for 1913 on the perpendicular (commerce 40, per capita commerce 24, coal 36, iron 39); and perform the same operation for the figures on perpendiculars above each of the other dates. Use for each item a characteristic mark, (cross, circle, triangle, square), which will enable you to distinguish it from the others. Then unite the marks of each kind by a curved or crooked line. Choose a characteristic form of line (dotted, wavy, or colored) for each item. If the chart be made on a large scale and with sufficient neatness, later tables of statistics (development of railroads, trade of particular countries, etc.), can be entered upon it.

With regard to each one of the items: when was the increase (measured by the slope of the line) greatest? When least? What relation is apparent in the increase of different items? Many of the questions suggested by a study of the figures will be treated in later sections.

2. Prepare a small chart of the figures, giving the estimated value of commerce 1700–1899; note the enormous gains made in the nineteenth century.

3. Development of printing, especially of periodical publications, in recent years. [Encyc., preferably the new International or Supplement to the Britannica, under Printing, Newspaper, etc. Cf. Scribner's Magazine, 1897, vol. 22, p. 447 ff., on the modern newspaper business; Taylor in Depew, One hundred years, chap. 25, Williams in same, chap. 26.]

4. Divide the perpendicular on the right-hand side of your chart into spaces, indicating the shares of the chief countries in commerce.

5. Make out a list of three changes coming under each one of the three heads discussed. Example: technical progress, wireless telegraphy; business organization, trusts; political, international arbitration, reciprocity.

6. Early history of the coal trade. [R. L. Galloway, The rise of the coal trade, Contemporary Review, 1892, 62: 569–578.]

7. Industrial and commercial importance of coal. [Edward Atkinson, Coal is king, Century Magazine, 1897–98, 55: 828–830.]

8. Effect of a stoppage of the coal supply. [Stephen Jeans, The coal crisis and the paralysis of British industry, Nineteenth Century, 1893, 34: 791–801.]

9. How does the increase in steam horse-power compare with the increase in the output of coal? With the growth of commerce?

10. Earliest history of the steam-engine (to about 1700). [Thurston, chap. 1, sect. 1.]

11. Earliest applications of the steam-engine. [Thurston, chap. 1, sect. 2.]

12. Development of the engine before Watt. [Thurston, chap. 2.]

13. Development by Watt and his contemporaries. [Thurston, chap. 3.]

14. Recent improvements. [Thurston, chap. 6; Iles, chap. 5.]

BIBLIOGRAPHY

Bibliographical aids become broader in the recent period. The great literature scattered through periodicals, in which articles of lasting value are often to be found, is made accessible by Poole's Index and its continuations; books in print, if not too technical for the general public, will be found in the A. L. A. (American Library Association) Catalogue, which supplies full titles and prices.

Various cyclopedias and dictionaries of commerce have been published in the nineteenth century; they are useful repositories of information, especially of statistics. Among them the following, in English, may be mentioned: McCulloch, ** Dictionary, various editions; Waterston, Cyclopædia, 1847; Macgregor, * Commercial statistics, 1850; Homans, Cyclopædia, 1858. Statistics are brought up to date in various year-books and periodicals; the ** Statesman's Year-Book is an indispensable annual, and will meet all ordinary demands of teacher and class.

The student of the history of commerce is often forced to turn to narrative political histories for information. Among the general histories of Europe in the nineteenth century may be mentioned Charles D. Hazen, * Modern Europe, N. Y., Holt, 1920; C. M. Andrews, * Modern Europe; N. Y., Putnam, 1899; Seignobos, ** Pol. hist.

Much has been written, of course, on the progress of the century in various technical lines. Ure's Dictionary, various editions, describes the advances of the first part of the century; and the student will probably find one of the modern encyclopedias (Britannica, with Supplement; International) the most satisfactory source of information on recent progress. No attempt can be made in this or the following chapters to cover the great field of technical literature. Jevons' ** Coal question should, however, be mentioned as still of great interest and value. Nicolls, * Story; Edward A. Martin, * Story of a piece of coal, N. Y., Appleton 1896; or R. Meldola, * Coal and what we get from it, N. Y., Young, 1897 can be assigned for reading by the class. Edwin C. Eckel, Coal, iron and war, N. Y., Holt, 1920, is an interesting and suggestive study in the physical bases of national industry. On the steam-engine, Robert H. Thurston's History, N. Y., Appleton, 1902 will probably be found most useful. The biographies by Samuel Smiles are a valuable history of technical progress, interesting and trustworthy. Of more recent books, designed for popular reading, George Iles, Flame, electricity and the camera, N. Y., Doubleday, 1900 contains attractive accounts of many features of technical progress.

CHAPTER XXIX

MACHINERY AND MANUFACTURES

327. Development of agriculture. — Pursuing now our survey of the technical advances of the century, we must notice first the oldest and perhaps the most important branch of production, agriculture. An American reader does not need to be told that farm work has been greatly changed by the introduction of improved tools and machinery. Even an implement so old and apparently so simple as the plow will do now better work with half the force formerly required. Cultivating and harvesting machines of various kinds spare land and labor. The introduction of artificial fertilizers has given new freedom and efficiency to the agriculturist.

328. Progress less in agriculture than in other branches of production. — Still, when all is said, agriculture is the branch of production which has been affected least by the changes of the century. The farmer is still bound to the soil and subject to the weather. Steam power has not made for itself the place which sanguine men once thought it would win. In Europe reforms have been effected in sweeping away antiquated institutions affecting the personal liberty and property rights of cultivators, who now, in free association, can work far more efficiently than before. In other continents the extension of the modern transportation system has effected a revolution in the choice of crops and the means of marketing them. Neither transportation, steam power, nor machinery, however, has vitally affected the methods by which crops are grown; and when the first fertility of new land has been exhausted and a growing population clamors for a cheap food supply, the world will find that one of its great problems is still unsolved.

329. Function of machinery. — For the great changes effected by the use of steam we look, of course, not to agriculture but to manufactures and transportation. These changes have been wrought through the medium of machinery, and the reader is asked to give particular attention now to the part which machinery plays in modern life. I spoke above of coal as offering power to men. How can you apply this power to a useful purpose? First, you must burn the coal under a boiler to produce steam; second, you must translate the expansive power of steam into regular forceful motion in an engine; finally, you must apply the force and the motion in just the way that is wanted by means of a machine. Evidently machinery does not depend altogether upon steam. Rude machines, mills for grinding grain, for example, were run by wind or water power long before the steam-engine was invented; water power is being transmitted by electricity in increasing quantities at present; and men hope that we shall be able to use the heat of the sun or the force of the tides to run machinery in the future.

330. Advantages of machines. — Practically, however, the great extension in the use of machinery has depended on the power obtained from coal through steam. Only in the period since the adoption of improved forms of steam-engine have we realized the possibilities of machines. They can be applied only to certain classes of work, especially that involving the constant repetition of an operation which can be easily regulated either by the machine itself or by a laborer supervising it. We can use machines, for instance, to make cloth and even to make clothes, but we do not use them in the operations of dressing and undressing. In their proper field, however, they are indispensable. They will accomplish tasks which are too great or too small for human hands. They repeat a process or copy a model with absolute fidelity. They never grow tired and they have no human failings; they often economize time and materials. Finally, and this is the point of decisive importance, in many lines of work they furnish the product at a cost far below that of hand labor.

331. Revolution in old industries effected by machinery. — To describe the manifold applications of machinery in the nineteenth century, within the limits of this manual, is impossible. Let the reader glance from the book to the objects surrounding him, and make a list of the ten objects which first attract his attention. If he will trace their history he will find, in all probability, that they are all the products of complicated machinery, which has been developed from the simplest beginnings in the course of the century. He will probably experience difficulty in finding a familiar object which has not been subjected to machine processes unknown in 1800. Machinery has heightened human productivity in certain lines a hundred or even a thousand fold. At the Atlanta Cotton Exposition of 1881, two carders, two spinners, and one weaver, from the mountain region of Georgia, could produce eight yards of coarse cotton cloth in a day of ten hours. The same number of persons in a modern cotton factory could produce 800 yards by machinery. The cotton goods produced for home consumption in the United States by 160,000 laborers at that time, would have required the services of 16,000,000 laborers without machinery. Again, a skilful woman can knit 80 stitches a minute by hand; a machine enables her to make 480,000.

332. Introduction of new industries. — Machinery has not only revolutionized old industries; it has created many new ones. A distinguished American economist expressed the opinion, about 1890, that half of all those who were then earning their living by industrial pursuits did so in occupations that not only had no existence, but which had not even been conceived of, a hundred years before. I may write with a steel pen, with a fountain pen, or with a typewriter; whichever choice I make I am giving employment to a group of mechanical laborers who did not exist in 1800. Taking a particular city as an example, the industrial specialities of Leipzig are said to have increased from 118 in 1751 to 557 in 1890, a growth of 372 per cent. Nor must we limit our view of the effects of machinery to the mechanical pursuits which are carried on about us. Increased efficiency due to the use of machinery has set men free from other pursuits to engage in commerce, education, domestic service, etc.

333. Importance of iron in the age of machinery. — One particular industry deserves special consideration here, by reason of the quality of its product rather than of the quantity of laborers employed or the mere exchange value of the output. Without iron the modern age of machinery would be, at best, of stunted growth. Jevons characterized admirably the modern industrial system when he said that steam is its motive power and iron is the fulcrum and the lever. It is safe, I think, to challenge the ordinary reader of the present day to name a machine which is not composed largely or almost wholly of iron. The whole structure of our modern industry depends on the means of getting cheap iron. "Without it the engine, the spinning-jenny, the power-loom, the gas- and water-pipe, the iron vessel, the bridge, the railway — in fact, each one of our most important works — would be impracticable from the want and cost of material."

334. Scarcity of iron before the nineteenth century. — Returning to the period about 1800 we find ourselves in a different world. I have described in a previous chapter the improvements effected in the manufacture of iron in the eighteenth century. Great as was the promise of these improvements, it waited long for full realization; well into the nineteenth century iron remained relatively scarce and dear and was spared in every possible way. A youth destined to play a leading part in the iron age (Joseph Nasmyth) visited the Carron Iron Works in 1823, and here is the description which he gives of a celebrated foundry and machine shop, associated with the construction of the first working steam-engine by Watt. "Much of the machinery continued to be of wood. Although effective in a general way it was monstrously cumbrous. It gave the idea of vast power and capability of resistance, while it was far from being so in reality." If this was the condition at the Carron Iron Works, what must it have been in ordinary factories?

335. Development of machine tools for working iron. — Iron was little used, partly because it was hard to get and partly because it was hard to work. There were in England about 1800 only three good machine shops, where small steam-engines were built. The equipment of even the best machine shop would seem now wretchedly inadequate, and Stephenson was greatly hampered, in building his first locomotive, by the lack of good machine tools, for working metals. William Fairbairn said in his presidential address before the British Association at Manchester, "When I first entered this city [about 1813] the whole of the machinery was executed by hand. There were neither planing, slotting, nor shaping machines; and, with the exception of very imperfect lathes, and a few drills, the preparatory operations of construction were effected entirely by the hands of the workmen." About 1825 to 1830, however, with the growth in demand for iron-working apparatus, there began a rapid development of this branch of manufacture, one step in advance leading rapidly to another. We may trace the process in the description that Nasmyth gives us of his first machine shop, a shed measuring 24 by 16 feet. "I removed thither my father's foot-lathe, to which I had previously added an excellent slide-rest of my own making. I also added a 'slow motion,' which enabled me to turn cast-iron and cast-steel portions of my great Mandsley lathe. I soon had the latter complete and in action. Its first child was a planing machine capable of executing surfaces in the most perfect style; it was 3 feet long by 1 foot 8 inches wide. Armed with these two most important and generally useful tools, and by some special additions, such as boring machines and drilling machines, I soon had a progeny of legitimate descendants crowded about my little workshop, so that I often did not know which way to turn." Nasmyth himself made one specially important contribution to iron-working machinery, by the invention of the steam hammer in 1839; the old "bit by bit" system of welding became henceforth unnecessary.

336. Steel, character and utility. — While the limits of our space will not permit us to trace further the development of machine tools, which have been made marvelously efficient in recent years, and while we must also forego a study of the details of iron production, the topic of steel manufacture certainly deserves some consideration. Ordinary cast iron, while strong and hard enough for many purposes, still is brittle by reason of the large proportion of carbon and other impurities which it contains. These impurities may be burned out in the puddling process, and the nearly pure iron thus obtained, called malleable or wrought iron, has a toughness enabling it to resist far greater strains than cast iron can stand. Intermediate between the two irons, and containing one per cent of carbon, more or less, is still another product, steel, which may be made even more tenacious than wrought iron, or even harder than cast iron. Its peculiar property of "taking a temper" is probably known to most readers. The valuable properties of steel have been known and prized for ages, but till well into the nineteenth century it could be used only sparingly; it was commonly manufactured by first making wrought iron, by the tedious process of puddling, and then heating the iron bars in contact with charcoal until they had absorbed the proper amount of carbon. The expense of this process prohibited the use of steel for most purposes; the wrought iron cost $75 a ton and the finished steel $250 or more; and the output would seem to-day inconsiderable.

337. Recent improvements in the manufacture of steel; the Bessemer process. — Many men have contributed to bring the manufacture of steel to its present efficiency, and we may notice only the names associated with the greatest improvements. An Englishman, Bessemer, patented in 1855 the idea, as simple as it is ingenious, of turning cast iron directly into steel by blowing air through it when melted, and so consuming the excess of carbon. It has not proved possible to make good steel according to Bessemer's original idea, but with a slight modification his process has been wonderfully successful; in present practice all the carbon is burned out by the air current, and then the requisite amount is added before the metal is poured out. Ore containing a large amount of phosphorus is treated by melting it in a converter lined with lime, which removes this dangerous impurity ("basic process").

338. The open-hearth (Siemens-Martin) process. — Still another contribution to modern methods of steel manufacture, known as the "open-hearth," or, from the names of its introducers, the Siemens-Martin process, has been of great importance since about 1870. The steel is made from ore or from a combination of different kinds of iron, and, by peculiar devices for economizing the heat of the furnace, the process may be continued so long and regulated so carefully that a product of high quality may be turned out at a moderate cost. The result of all these processes has been to change steel from a luxury to a necessity of modern life. Modern mild steel is 40 per cent stronger than iron, and is tough enough to be tied in a knot or punched in the shape of a bowl when cold. The increase in efficiency due to its substitution for iron in machinery, railroads, ships, and structural work is simply incalculable.

339. Development of the modern chemical industry. — In detailing at such length as I have done the exploits of machinists in the past century, I may tempt the reader to undervalue the contributions of scientists. To guard against that error let us consider briefly the development of the chemical industry, which, like the iron industry, renders a service to modern civilization beyond any measure of dollars and cents. The Frenchman, Lavoisier, had established chemistry on a scientific basis before 1800, but industrial chemistry used still the primitive methods which had been employed for ages. Let us take, for instance, the single substance, carbonate of soda, of prime importance in industrial chemistry, for on it depend the various industries of glass, pottery, soap, photography, paper, etc. This substance was still obtained in the eighteenth century, by burning seaweed and seashore plants and treating their ashes; Spain had a considerable export of barilla, and owed to this product whatever success she attained in the soap manufacture. Leblanc emancipated the soda industry from kelp and barilla, by introducing the process based on sulphuric acid and salt; step by step improvements have been made since then. Sulphuric acid, discarded in the soda industry, has grown in importance notwithstanding; it is the controlling element in the manufacture of other acids, commercial fertilizers, alum, ether, glucose, etc., and in oil refining; and it is produced at a price and of a quality formerly unknown. The discovery of the anilin colors, in 1859, has revolutionized the art of dyeing. The chemist will make you, from coal tar, almost any color or shade desired. He will make you perfumes or flavors; and, if he has failed to construct quinine artificially, he has at least learned, in his attempts, to make substances such as antipyrin and phenacetin, of equal value for other purposes.

340. Influences determining the local distribution of manufactures. — A review of the contents of this chapter, with its discussion of the factors which have built up modern industry, should suggest to the reader the countries which have enjoyed exceptional advantages in the modern manufacturing period. Resources of coal and iron, clearly, are of great importance. That they are not decisive, however, is proved by the absence of modern manufactures in China, where there are abundant supplies of coal and iron, and their presence in districts like the North of Ireland, where, for instance, a great ship-building industry is fed with imported iron and coal. Factories can exist at a considerable distance from their source of supply if they are served by a transportation system which will fetch raw materials and carry finished products cheaply; efficient transportation is essential. Many other elements might be suggested as going to form the basis of national success in manufactures, but of them all I desire here to emphasize only two: good government and intelligent men. Manufactures cannot thrive in a country where unwise or corrupt methods of taxation rob the investor of his gains. Nor can they prosper, whatever other advantages a country may have, if it lacks intelligent and steady laborers, or clear-sighted and energetic leaders. The reader will have an opportunity, in later chapters, to test the truth of these statements; meanwhile, in anticipation, attention may be directed to the United States, England, and Germany, as those countries which have most signally proved their fitness for manufacturing.

QUESTIONS AND TOPICS

1. Development of the science and art of agriculture in the nineteenth century. [Encyclopedia.]

2. Artificial fertilizers. [Peacock, in Cosmopolitan Magazine, Nov., 1895.]

3. A modern wheat farm. [Scribner's Magazine, 1897, vol. 22, p. 531 ff.; Edgar, Story of a grain of wheat. Note that "bonanza" farms are *not* typical of modern agriculture in general.]

4. What use is coal without a steam-engine? What use is machinery without a steam-engine? What use is a steam-engine without coal or machinery? Which would the world give up most readily, coal, steam-engine, or machinery?

5. Character and advantages of machinery. [Hobson, Mod. cap., chap. 3, sects. 1–3.]

6. How much have women gained by being relieved of the necessity of making cloth for family use? [Read description of the labor of spinning, weaving, etc., in colonial times; see Alice M. Earle, Colonial dames and goodwives, Boston, 1895, or Syndey G. Fisher, Men, women and manners in colonial times, Philadelphia, 1898.]

7. Effect of the introduction of machinery on the demand for labor in different occupations. [Hobson, Mod. cap., chap. 8.]

8. The growth of factories. [Bourne, Romance, chap. 9.]

9. Organization of a modern factory. [P. G. Hubert, The business of a factory, Scribner's Magazine, 1897, vol 21, p. 306 ff; Fred J. Miller, The machinist, same, 1893, vol. 14, p. 314 ff.]

10. Progress in the iron manufacture. [Iles, chap. 4; R. R. Bowker, A bar of iron, Harper's Magazine, 1893–4, 88: 408–424, F. W. Taussig, The iron industry in the U. S., Quarterly Journal of Economics. Feb., 1900, reprinted in Bullock's Selected Readings in Economics.]

11. Development of machine tools for iron working. [Sellers, in Depew, One hund. years, chap. 49.]

12. Progress in the steel manufacture. [R. R. Bowker, A steel tool, Harper's Magazine, 1893–4, 88: 587–602; Waldon Fawcett, The center of the world of steel, Century Magazine, 1901, 62: 189–203.]

13. Write a biographical sketch of one of the following: Bessemer, Siemens, Whitworth, Brown, Thomas, Snelus. [W. T. Jeans, The creators of the age of steel, N. Y., 1884.]

14. Write a report on advances in the manufacture of one of the articles named. [Encyclopedias; on coal tar products see Meldola.]

15. What conditions have led to the rise of the characteristic manufactures of your own vicinity? In what regions are their chief competitors? What are the relative advantages of different places with respect to some particular manufacture?

BIBLIOGRAPHY

See the previous chapter for books of general reference. The modern manufacturing organization and the influence of machinery have been treated, from the economic standpoint, by Hobson, Modern capitalism, and Schulze-Gaevernitz, The cotton trade, Manchester, 1895. A history and analysis of the factory system by C. D. Wright was published in the Tenth U. S. Census, 1880, vol. 2; further references to U. S. public documents will be given below, in the chapters on the United States. The English parliamentary papers and accounts contain an immense amount of material on this subject; the last volume of Cunningham, Growth, has useful references to them. The technical history of manufacturers defies compression. Much interesting material may be found in the reports of the U. S. Commissioners to various world expositions.

A good account of the history of machine making is provided by Joseph W. Roe, ** English and American tool builders, New Haven. Yale Univer. Press, 1916.

CHAPTER XXX

ROADS AND RAILROADS

341. Commercial importance of the subjects of the chapter. — "Of all inventions, the alphabet and the printing-press alone excepted, those inventions which abridge distance have done most for the civilization of our species." Macaulay's celebrated sentence applies to civilization in general. With regard to the material civilization depending upon commerce, certainly no factor has been of greater importance than improvement in the means of transportation and communication. An improvement in these means has been effected during the past century, without a parallel in the world's history; and a description of the changes deserves the most careful attention of the student in the short space which can be allowed the subject.

342. Statistical survey of development. — For a convenient means of reference I introduce, in this place, a statistical table (on opposite page) showing the development of the most important modern instruments of transportation and communication.

343. Improvement in the condition of roads. — Aside from the stretches of canal which had been brought into operation, the universal means of inland transportation about 1800 was the road. Some reference has been made in an earlier chapter to the condition of English highways in the eighteenth century, and to the improvements which marked that period. Conditions on the Continent were worse than those in England. French roads were mere tracks in the first part of the eighteenth century, and for the most part were still hopelessly bad at its close, when the system of maintaining the roads by forced labor was abolished.

From near the close of the eighteenth century, however, we may date the beginning of a period of rapid improvement in the roads of western Europe. The turnpike system, which allowed tolls to be charged for the use of improved highways, encouraged the investment of capital in these undertakings. The teachings of Telford and Macadam, two great road-engineers who emphasized the necessity of using good materials and securing proper drainage, were generally applied. In the period from 1800 to 1850 the roads of Europe were reformed to meet the demands which commerce made upon them, before the introduction of the railroad, and were put in the excellent condition which attracts the attention of American travelers to-day. The cost of freight transportation was reduced to half or less of what it had been, and the speed of passenger service increased correspondingly. An Englishman, Porter, notes that in 1798 he occupied nineteen hours in traveling eighty miles by what was considered a "fast coach"; when he wrote, in 1838, the trip was made in eight hours.

	Shipping Million Tons			Railways Telegraphs Cables		
	Sail	Steam	Carrying Power	Thousand Miles		
1800	4.0	....	4.0	....	....	....
1820	5.8	.02	5.8	....	....	....
1830	7.1	.1	7.5	.2	....	....
1840	9.0	.3	10.4	5.4	....	....
1850	11.4	.8	14.9	23.9	5.	.02
1860	14.8	1.7	21.7	67.3	100.	1.5
1870	12.9	3.0	25.1	139.8	281.	15.
1880	14.4	5.8	37.9	224.9	440.	49.
1890	9.1	8.2	42.3	390.0	768.	132.
1900	6.6	13.8	62.1	500.0	1,180	200.
1910	4.6	22.0	92.8	637.0	1,307	291.
1913	3.8	26.5	109.9	690.0	1,462	330.

344. Importance of roads in the present transportation

system. — A word of warning may be advisable before we leave this subject to study more recent means of transportation. Not many years ago a French economist estimated that not one twentieth of the settlements of the inhabited world were within less than a day's distance from a railroad. Even in the most advanced countries the extent of roads far exceeds that of railroads, and only in the rarest cases do products reach the consumer without having traversed a stretch of common road. The road, therefore, takes a place in our modern economy more important than, in our carelessness, we generally admit.

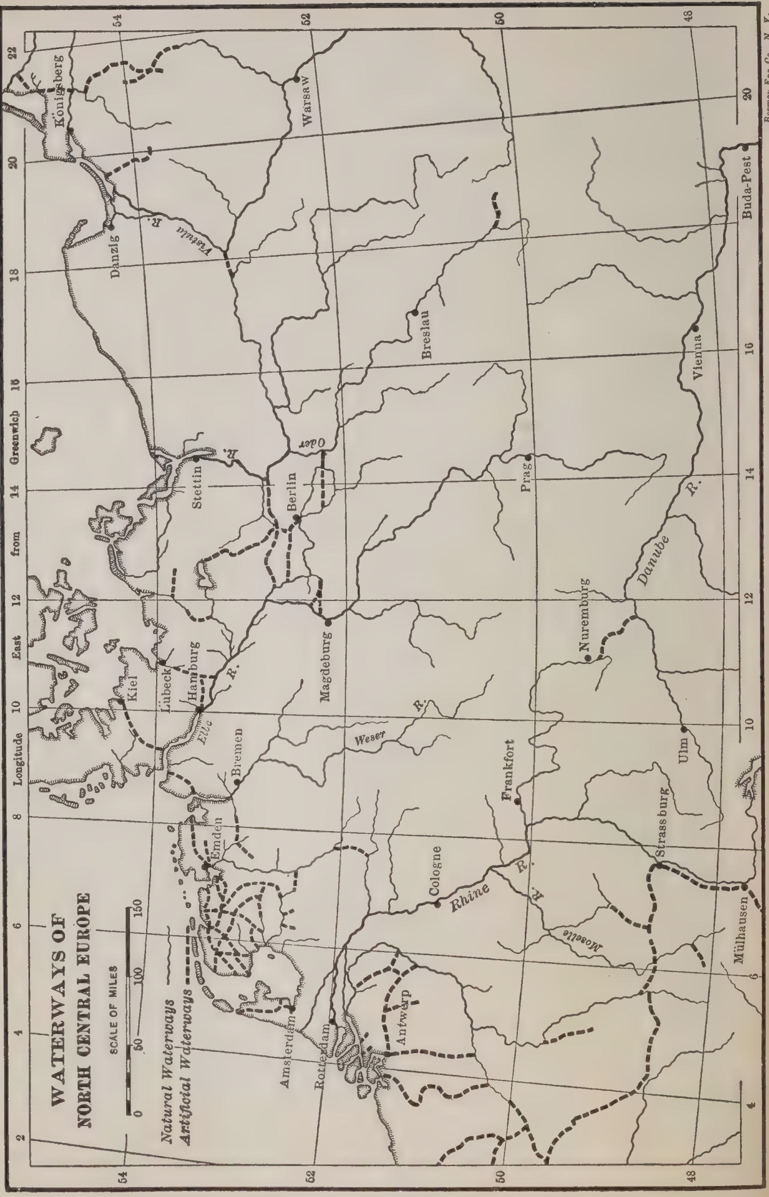
The unit for measuring the expense of transportation is the cost of moving a ton one mile; on a modern American railroad the average cost of a ton-mile is less than one cent. Even on the excellent roads of Europe the cost is ten cents or more; while it has been estimated that the average cost of moving farm produce to market over the common roads of the United States is twenty-five cents per ton-mile. Assuming that the average haul is twelve miles, and that three hundred million tons are carried in a year, the expense reaches the total of nine hundred million dollars, a sum greater than the operating expenses of all the railroads of the United States before 1900.

It has been proved by actual test that the same force which draws one ton on a muddy earth road will draw four tons on a hard macadam road. One of the greatest improvements in transportation is still, in large part, neglected by the American people; and intelligent energy will find in no field richer results than in the reform of our common roads. Such a reform would economize time and force, would reduce wear and tear, and would greatly better the business position of the farmer by enabling him to choose his own time for marketing his goods and making his purchases.

345. Advantage of transportation by water; canals. — The student may, perhaps, remember that in the Middle Ages the expense of transportation by road led people to choose rivers for conveying their goods, whenever this was practicable. It has been estimated that a horse which could carry on its back two or three centner (a centner is about 110 lbs.) could with equal exertion drag twenty centner on a highway, or 1,200 through dead-water. This enormous gain in efficiency, resulting from the avoidance of the slightest difference in level and from the reduction of force wasted in friction, suggested to people in early times the idea of establishing channels for water where none had previously existed, that is, of building canals. Locks, for controlling the flow and level of the water, were invented toward the end of the Middle Ages, and a considerable extent of canals had been constructed on the Continent before the Bridgewater canal, described above, was opened in England. The real era of the canal, however, was in the period which may be limited roughly by the dates 1750 and 1850.

346. Development of canals, 1750–1850. — Immense amounts of capital were invested in canals in this period of their great importance; and the European and American systems of barge canals were constructed substantially on the lines which they have since retained. A traveler could then, as now, voyage through most parts of central and eastern Europe without leaving a canal-boat. Of a country like England, endowed by nature with advantages for water communication, it could be said in 1838 that no spot south of the county of Durham was more than fifteen miles from the means of water conveyance. Factories were established along the canals, as now along the railroads. Canals relieved the highways of a large part of the growing traffic, carried many raw materials which could not have borne the expense of transportation by road, and enjoyed even a considerable share of passenger traffic.

347. Relative decline in importance of canals. — Of canals as of roads it may be said that their days of usefulness are far from past. One class, indeed, that of the great ship canals, has grown rapidly in importance in recent years. Many economists believe that even the barge canals should be main-



WATERWAYS OF NORTH CENTRAL EUROPE

Bormay Eng. Co., N. Y.

tained and improved. There is still an active canal traffic in Europe, especially in Germany, and in the last-named country a notable project for extending the canal system is under consideration. The future of canals seems to depend largely on the introduction of improved forms of motor (electricity, gasoline).

The canal has certainly yielded the place of first importance in internal transportation to the railroad. Its great merit, cheapness, has declined in importance with the reduction of railroad rates, while its drawbacks are felt more and more under the conditions of modern business. The canal is not only much slower and more uncertain than the railroad; its vital weakness is the fact that in temperate climates its usefulness is destroyed during at least a part of the winter. Since 1850 canal systems have grown slowly, if at all, and in some countries they have declined greatly. Nearly half of the English canals are now controlled by the railroads; some are closed and out of repair, and traffic is diverted from others by heavy tolls.

348. Origin of the steam railroad. — Soon after 1800 the American inventor, Evans, asserted more than once that he could manage to drive wagons on railways by steam. He expressed an idea that was by no means new, and that was then floating in the minds of many men. He said truly, however, that one step in a generation is enough, and that the monstrous leap from bad roads to steam railways could not be taken at once. Roads were improved, canals were extended, and still there was a demand for better means of transportation. Rails, first of wood and then of iron, had long been laid to enable horses to draw heavier loads at mines and quarries. George Stephenson, among others, conceived the idea of applying steam as the motive power on these railways, and distinguished himself above all predecessors by constructing, in 1814, a locomotive, *Puffing Billy*, which proved capable of hauling coal over a stretch of nine miles, from the mine to tide-water. Stephenson improved his original model, especially by the introduction of the steam blast to help the draft and so increase the power of the boiler; and in 1825 secured the adoption of the locomotive on the Stockton and Darlington Railway in Yorkshire. The call for this improvement had now become pressing. The port of Liverpool and the important manufacturing center, Manchester, distant only about thirty miles, were now connected by three canals, yet these were so crowded with traffic that it took sometimes a month for cotton to reach the factories from the sea. The opening of the Liverpool and Manchester Railway in 1830, with a locomotive, the *Rocket*, which made twenty-nine miles an hour, may be taken as the completion of the period of experiment, and the beginning of the railroad era.

349. Early period of the railroad. — Though steam locomotion after 1830 was a proved success, and though railroads were rapidly extended, and 1,600 miles had been brought into operation in 1835, the men of the time had still much to learn concerning their new instrument of transportation. Some men expected from it a speed of 75 or 100 miles an hour, while the State Engineer of Virginia took it as an admitted fact "that a rate of speed of more than six miles an hour would exceed the bounds set by prudence, though some of the sanguine advocates of railways extend this limit to nine miles an hour." In certain localities the steam railroad, from the start, performed great service in freight carriage. At the Pennsylvania coal mines, for instance, it reduced the cost of hauling a ton nine miles to the river from $4.00 to $.25. Still the cost in general was high; a charge of ten cents per ton-mile was authorized in some early charters; and few people believed that the railroad could compete successfully with the canal in the transportation of ordinary freight.

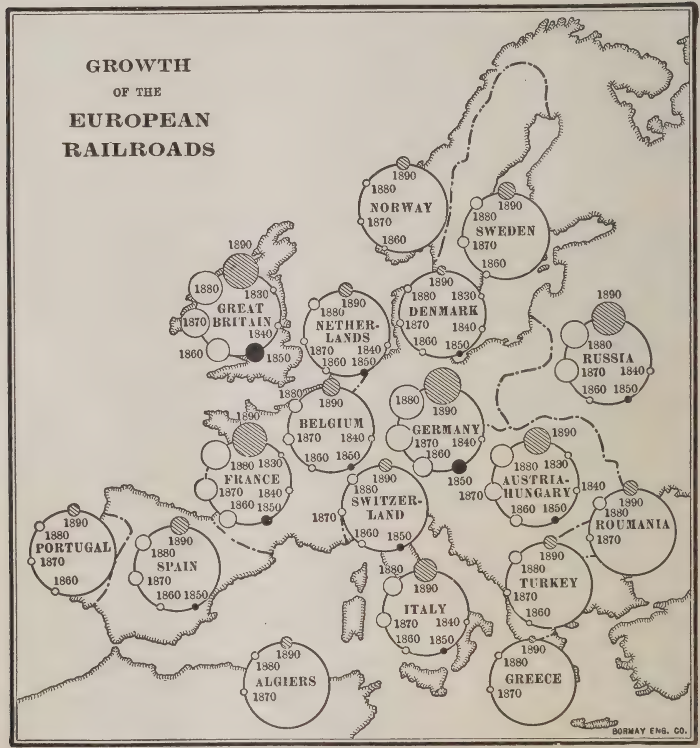
350. Improvements in locomotives. — The technical improvements which have extended the usefulness of the railroad far beyond the dreams of its earlier promoters have been comparatively simple. Mere increase in size of locomotives and cars has been the greatest factor in increased efficiency. The engine which Peter Cooper constructed for experiment on the Baltimore and Ohio, about 1830, had a boiler the size of a flour barrel, weighed less than a ton, and was about the size of a modern hand-car. It was of little practical use. The development from early engines of the class of the *Rocket*, to those of modern American practice, is shown in the following figures:

	Weight	Hauling Power on Level
Early	5 to 6 tons	40 tons
Improved	25	1,200
Modern	50	2,400

In 1914 the average weight of the simple locomotive in the United States was 82 tons. Not only does a large locomotive put to more economical use the heat applied; the large train, also, costs far less in proportion for the services of men employed in running it.

351. Importance of steel in railroad construction. — To many readers practical devices like the air-brake, further reducing the cost and increasing the efficiency of operation, will be familiar. One factor in improvement, however, is not so apparent, and deserves special attention by reason of its commanding importance. The railroad in its modern form would be impossible if Bessemer and others had not taught the world to make steel cheaply. Iron rails, even under comparatively light loads, wore out and had to be replaced constantly. Steel rails, introduced gradually after 1860, could bear double the load on each wheel, and still outlive many iron rails. The modern rail, simple as it appears, is both in material and in proportions a great feat of engineering, "a beam whose every dimension and curve and angle are exactly suited to the tremendous work it has to do." Steel rails and steel bridges have made possible the economy of the colossal locomotives of modern times. Steel has enabled men, instead of building 10-ton cars to carry 10 tons of cargo, to build

12-ton cars to carry 20, or 14-ton to carry 30; each improvement of this kind represents a saving in the dead weight of the train, and a consequent reduction in cost. Steel has furnished a material for the bridges over which the cars are carried, enabling a span of 500 feet to be constructed as readily as a span of 250 feet, with the iron formerly employed.



The size of the small circles indicates the railroad mileage of each country at ten year intervals. To facilitate comparison, the circles for 1850 are printed black, and those for 1890 are shaded. Note the disproportion of mileage and area.

352. Development of the railroad system after 1850. — Improvements in the construction, the equipment, and the operation of railroads, for the mere suggestion of which there is scarcely space here, explain the rapid growth of the railroad system shown in the figures at the opening of the chapter. It will be noted that over 99 per cent of mileage has been constructed since 1840, and that even in 1850 the world had made but a mere beginning in railroad construction. About the middle of the century began a movement toward the consolidation of existing lines, which had formerly been operated in short stretches by independent companies. The student should note that this consolidation proceeded largely along the length of railroads, not in the modern fashion by the union of parallel and competing lines; and it is almost impossible to exaggerate the benefits that resulted, in increased efficiency of management, improved service, and lower rates. About this time (1854) the first railroad was built across the Alps; the Union and Central Pacific route was opened in 1869, beginning the era of the transcontinental roads; and investors and engineers, who found the older and more advanced sections adequately supplied with railroads, began now to build lines far out into new territory, to open up fresh land and develop new trade.

353. Importance of railroads at present. — Some attention will be paid hereafter to the decisive influence which the railroad has exercised on recent commercial development; and in the history of commerce in particular countries the thoughtful student will not fail to recognize this influence even when it is not specifically pointed out. In leaving the subject at this point, however, the student may be grateful for a summary estimate of the relative importance of railroads and other instruments of production in our modern life. A good authority has estimated that one quarter or even one third of the total invested capital of civilized nations has taken the form of railroads. It is doubtful whether the manufacturing establishments of the world are equal in value to its railroads; while the world's whole stock of money would buy but a fraction of them. The railroads of the United States carried in 1900 a thousand million tons of freight at a cost of a thousand million dollars, and at the rate of less than three quarters of a cent per ton-mile. The student may, from these figures, estimate the service of railroads to the average individual in the country, and may rest assured that the work they do could not be accomplished by the means in use a century ago, even if the whole annual product of the country were squandered in the attempt to carry it on.

QUESTIONS AND TOPICS

1. See the suggestion on the treatment of the statistics in sect. 315. Combine the statistics of the sections 315 and 342 in one chart, if practicable. See below, sect. 354, for the explanation of carrying power; a steamer is estimated to have four times the efficiency of a sailing vessel, in this table.

2. What is the cost of transportation over roads in your vicinity? What system of construction and maintenance is pursued?

3. Write an essay on one of the following topics, from the circulars of the Office of Road Inquiry, U. S. Department of Agriculture. (Copies may probably be secured gratis on application.)

(*a*) The proper method of constructing and repairing earth roads. [Circular no. 8.]

(*b*) Methods of constructing macadamized roads. [No. 21.]

(*c*) Repair of macadamized roads. [No. 30.]

(*d* The best system of maintaining roads. [No. 24.]

(*e*) Systems of State aid. [No. 32, Minn.; No. 35, N. Y.]

4. Effect on the agriculture of the U. S. of the present roads. [Report of the U. S. Industrial Commission, 1900, vol. 10, pp. ccix–ccxvi.]

5. The place of canals in the transportation system of a modern European state. [O. Eltzbacher, The lesson of the German water-ways, Contemporary Review, Dec., 1904, 86: 778–797.]

6. Early history of the railroad. [See a biography of Stephenson, by Smiles, or in one of the encyclopedias or biographical dictionaries.]

7. Early locomotives. [Thurston, Hist., chap. 4.]

8. American improvements in locomotives and cars. [Amer. Railway, p. 100 ff.]

9. Improvements in railroad construction. [Same, p. 1 ff.]

10. Feats of railroad construction. [Same, p. 47 ff.; Vernon-Harcourt, chap. 2.]

11. Modern bridges. [Vernon-Harcourt, chaps. 6, 7.]

12. Modern railroad management in the United States. [Amer. Railway, 149 ff.]

13. Development of railroad organization and its effects. [Same, pp. 344–359.]

BIBLIOGRAPHY

A good article on the history of highways will be found in the Edinburgh Review, 1864, vol. 119, p. 340 ff. See also Smiles' Lives of the engineers, and, for conditions in England before the railroad, Stanley Harris, Old coaching days, London, 1882, or W. O. Tristram's book on the same subject, London, 1893.

For the bibliography of canals and railroads see Bowker and Iles, and Palgrave's Dictionary. Among the many books the following will probably be most serviceable: E. J. James, Canal and railway; J. S. Jeans, Water-ways; E. R. Johnson, * Railways; A. T. Hadley, * Railroad transportation. All of these include historical and descriptive matter, along with economic criticism. ** The American Railway, made up of articles contributed by various authors to Scribner's Magazine, has much matter of value and interest to the student of the history of commerce.

CHAPTER XXXI

MEANS OF NAVIGATION AND COMMUNICATION

354. Transportation by sailing vessels and steamers. — Steam has won for itself, in the course of the century, the commanding place in sea transportation as well as in land transportation. The struggle with competitors has lasted longer and the victory has been less complete. Steam navigation, however, offers such advantages in sureness, safety, speed, and cost, that sailing vessels have been forced out of some of the most important branches of commerce, and must content themselves with what the steamers leave them. Reference to the table at the opening of the preceding chapter will enable the student to follow the development of the means of transportation by sea in the course of the century, and to observe the growth in importance of the steamer. In explanation of the figures of carrying-power it should be said that a steamer is regarded as having three or four times the efficiency of a sailing vessel of equal tonnage; such an estimate is, of course, a mere approximation, and, indeed, the figures of tonnage, especially in the earlier part of the century, are themselves very uncertain.

355. Development of sailing vessels. — European sailing vessels at the opening of the century followed substantially the clumsy lines of the old East Indiamen. The chief credit for the improvement of wooden vessels is due to the Americans, whose clipper ships, marvels of grace and speed, were without rivals in their day. The clipper *Dreadnought* made the passage from New York to Queenstown in less than ten days, and in 1846 the American *Tornado*, starting from England with an early steamer of the Cunard line, reached America before her. The *Great Republic*, an American four-masted clipper, was of 3,400 tons and was the largest sailing vessel in the world; British ships of this period rarely exceeded a thousand tons in register.

The suggestion of iron for building ships was met at first with ridicule; some people, of course, thought that an iron ship would surely sink, and more serious objections were found in the cost, the derangement of the compass, and the fouling of the ship's bottom. Iron, however, came gradually into use for steamers, and, after 1850, was applied more and more generally to the constructions of sailing vessels. Iron vessels were actually superior in buoyancy to wooden, drawing less water and carrying more cargo with a given tonnage; they were cheaper in the long run, because they are stronger, more durable, and less exposed to destruction by fire. Furthermore, iron was absolutely essential if the size of ships was to be increased. Builders of wooden ships were limited by the average height of trees, and, in spite of all devices, could not construct a frame sufficiently strong for a vessel exceeding about 300 feet in length. The size of an iron or steel ship is practically unlimited. The cost of ships constructed of metal has decreased with advances in the manufacture of iron and steel; remedies, fairly satisfactory, have been found for the derangement of the compass; and though it has been found impracticable to apply copper sheathing to steel ships, the fouling of the bottom is an evil of minor importance.

356. Relative decline of sailing vessels, notwithstanding improvements. — During the second half of the nineteenth century the wooden ship gradually disappeared from the seas, giving place to vessels constructed first of iron and then of steel. The country which suffered most from the change, as will appear later, was the United States; the country best prepared to profit by it was England. The English now rapidly enlarged the dimensions of their ships, and improved their rig and model. Some of the modern steel ships carry 5,000 tons of cargo, or even more. A study of winds prevailing on the ocean, to which an American officer, Maury, made important contributions, enabled sailing vessels to choose a course which, on many routes, shortened the duration of the voyage a third or more. Steam has been applied for handling the cargo, and for managing the rudder and sails.

In spite of all improvements the sailing vessel has not been able to keep its share of sea-borne commerce. So much depends on certainty in modern business that the merchant will gladly pay a higher freight rate to be relieved of the element of uncertainty which is bound to attend navigation by sails. Steamers now exceed the sailing vessels of the world not only in tonnage, and still more in effective carrying capacity, but even in number also, if only vessels of 100 tons and above are counted.

357. Steamers used at first chiefly for internal navigation. — American inventors made a practical success of steam navigation soon after 1800; a brief notice of their work will be given later. The steamer was used at first, however, chiefly for internal navigation and for short coasting voyages. It was of immense importance in furthering the development of the Mississippi Valley in America; and it soon made a place for itself on the European rivers. About 1840 there was a rapid development of steam transportation on the German rivers, and this has not ceased to grow in volume and efficiency. Chains have been laid along some of the river beds; on the Elbe, for instance, a chain extends all the way across Germany and even into Bohemia; and by this means steamboats are enabled to haul their barges up-stream against a strong current. The application of steam to ocean navigation did not become of great importance until about the middle of the century. At that time only one fifth of the steam tonnage entering British ports came from foreign ports; the rest was employed still in the coasting trade.

358. Beginnings of steam navigation of the Atlantic. — The credit for the first passage across the Atlantic by steam has often been ascribed to the American ship *Savannah*, which arrived at Liverpool in 1819 after a voyage of twenty-nine days. This boat, however, should be classed as a sailing ship with auxiliary engine, rather than as a steamer; the paddle-wheels were arranged to be removed and hoisted on deck when the wind was fair. It made most of the distance by sailing, and the scanty supply of coal gave out before it reached its port, so that, as the log reads, there was "no cole to git up steam." A Canadian boat, the *Royal William*, actually did make the whole passage under steam in 1833, but stopped at Pictou for coal on the way; while the first regular steamship to cross without recoaling was the *Great Western* in 1838. The considerable intervals between these trips show that navigation of the ocean by steam was still in its experimental stage. Indeed, in the very year 1838, in which the *Great Western* and the *Sirius* began the period of practical application, a leading English scientist set out to prove by arguments and statistics that the project of connecting Liverpool and New York by direct steamer trips was "perfectly chimerical." The Cunard Company was founded the next year; and some measure of the appreciation of the American people is given by the fact that when Mr. Cunard arrived at Boston in 1840, on the first trip of the new line, he received (it is said) no less than 1,873 invitations to dinner within twenty-four hours!

359. Improvement of the means of steam navigation. — The early steamers were moved by paddle-wheels, which offer special advantages for use in shallow water, but which are not so efficient as the screw propeller in the open sea. They require heavier and bulkier engines which must be placed in the best part of the ship, they waste power, and they show the effects of wear and tear more quickly. The *Great Britain*, which made its first voyage in 1845, was noteworthy on two accounts: it was the first large steamer (over 3,000 tons) to be built of iron, and it was the first to introduce the screw in ocean navigation. These two improvements were adopted by the Inman line (1850) and were gradually accepted by other builders.

In the second half of the century various improvements have added still more to the efficiency of the ocean steamer. Early steamers ran under such a low steam pressure that we find recorded in the log-book of one, "Broke the larboard steam-pipe, lapped it with canvas and rope-yarn and proceeded"! Higher pressures were introduced, and after about 1870 the steam was more fully utilized by compound engines, of which some have three or even four sets of cylinders. The introduction of twin screws, first applied to the *City of New York* (1889), has added rather to the safety than the speed of a passage, by permitting further development of the system of water-tight compartments.

360. Gains resulting from increase in size. — Another most important factor in the development of efficient steamers has been mere growth in size. A ship's carrying power varies as the cube of her dimensions, while the resistance offered by the water increases only a little faster than the square of her dimensions. Large ships, therefore, consume less coal per ton of cargo, and as large boilers and engines consume coal more efficiently than small ones, there is a double gain. Here again, as in the case of railroads, the introduction of cheap steel has been of immense importance, and may fairly be said to have revolutionized the art of ship-building since 1875. While in 1880 nine tenths of British steamers were still constructed of iron, the proportion had sunk in 1890 to less than one twentieth, and the employment of steel is now almost universal. From steel are constructed the great cargo-carriers and the fast express steamers of the modern oceanic service. Some conception of the progress that has been made can be got by a comparison with earlier conditions. In 1841 the total steam tonnage of the British Empire was 188,000; nowadays a single steamer (*Leviathan, Majestic*) has a tonnage in excess of 50,000. The horse-power of British steamers in 1841 was estimated at 75,000; nowadays a single steamer, has an indicated horse-power almost equal to that total. The boilers of a modern express steamer (*Teutonic*) were required to evaporate 120 *tons* of water every *hour*), yet so thoroughly is the heat utilized that it was said of a steamer some years ago that the burning of a sheet of paper would move a ton a mile.

361. Resulting decline in freight rates. — Even in 1884 a competent writer could make this interesting statement: twenty years before, a steamer of 3,000 tons had to allow for coal and machinery on a given voyage 2,200 tons, and must confine the cargo to the remaining space; at the date when he wrote the great improvements had reversed the proportions, so that only 800 tons were needed for motive power and 2,200 were devoted to cargo. Manifestly steamship owners would be enabled by a change of this character to lower greatly the charges for transportation, and freight rates have, in fact, declined steadily in the course of the century. Lancashire spinners could transport their raw cotton from the source of supply in America at one sixteenth the cost which they had to bear sixty years before. Even in the last quarter of the century ocean freight rates dropped to one half, one third, or even one fourth, of the figures prevailing in 1874.

Conditions such as have been thus briefly suggested explain the immense increase in sea-borne traffic during the century. For the carriage of that traffic the merchant has now at his disposal not only the sailing ship and the "tramp," the general-utility steamer, but also a multitude of special boats for special services: the tank-steamer for transporting liquids cheaply, the cattle steamer for live stock, and the steamer with refrigerators for dead meat, the fruit steamer, etc. The use of oil as fuel and the introduction of explosion motors of the Diesel type promise to raise still higher the efficiency of transportation.

362. Modern ship canals. — This survey of the development of the means of navigation may fitly be closed by a brief consideration of the modern ship canals and their contribution to the growth of trade. There were, in 1900, a round dozen of these canals, capable of receiving sea-going ships. Some, serving special ports (Amsterdam, Manchester, etc.) were of purely local importance. Others have disappointed the expectations of their promoters. The canal across the isthmus of Corinth has been a distinct failure, and the Kaiser Wilhelm Canal, between the North and Baltic seas, has not yet acquired the share of commerce which its projectors promised for it. Leaving aside the St. Mary's canal in America there was up to 1914 but one ship canal which had proved its commanding importance, namely the Suez Canal.

A map of the world shows two narrow strips of land left by nature almost as though with the design of stimulating men to pierce them, the isthmus of Suez and the isthmus of Panama. A canal at either point unites not countries or small seas, but continents and great oceans, and saves thousands of miles in the routes of trade. The American isthmus presents great difficulties to the construction of a canal, but the Suez route runs through a district composed almost entirely of sand, with no elevation above 50 or 60 feet and with considerable parts actually below the level of the sea.

363. The Suez Canal, and its services to commerce. — The scheme of reopening the route across the isthmus of Suez, which, as said in the first chapter, had been made practicable for small vessels before the time of Christ, and had been rendered useless in the Middle Ages, was certain to rise as commerce between Europe and the East increased in volume. It is said to have been entertained by Napoleon I among others, but the credit for its accomplishment belongs to a French engineer and promoter, Ferdinand Lesseps. After more than ten years spent in preparation, work was finally begun in 1860, and the canal was ready for use in 1869.

The success of the Suez Canal may be gaged, from the investor's standpoint, by the fact that dividends have risen to 20 per cent, from the public standpoint by the fact that the tonnage accomodated by the canal in 1891 exceeded ten million, in 1907 exceeded twenty million, and in general has been roughly equal to the tonnage entering and leaving any one of the great seaports of the world. The duration of the voyage to India has been shortened by a third, and more than half of the voyages to the East are now made through the canal rather than around the Cape of Good Hope. The canal has been an important influence in furthering the growth of the world's steam tonnage, for it is practically barred to sailing vessels by the difficulties of navigation in the Red Sea; no sea-going sailing vessel has passed through it for years. It has made possible the movement of bulky wares formerly excluded from the trade with the East by the expense of transportation: rice, wheat, petroleum, and coal. It has not, however, produced one result which was expected, the diversion of trade to the countries of southern Europe, as in the time before the passage around the Cape had been discovered. Three quarters, in tonnage, of the ships using the canal have been British, and ships from the countries of northern Europe make up most of the remainder.

364. The Panama Canal. — Lesseps could not match in America the success which he had attained at Suez. A French company promoted by him started work at Panama in 1881, but became bankrupt before it had made much progress. Mismanagement at home, disease on the isthmus, above all the tremendous difficulties which nature has placed in the way of a canal at sea level, contributed to this result. The United States took up as a national enterprise a work which now offered but little attraction to private capital, bought out the French company, and in 1904 made arrangements to begin operations. Taught by the experience of the past the government decided on a canal with locks, reaching an altitude of 85 feet above sea level, and took the precautions suggested by sanitary science to protect the laborers against the menaces of plague, yellow fever and malaria. Under army engineers the work was carried on to a successful conclusion, and the canal was opened to traffic in August, 1914. The cost of construction was about $350,000,000.

In the first year of its operation the Panama Canal accomodated about five million tons of shipping; in the year ending in 1920 the figure had risen to about ten. The dislocation of traffic caused by the European War, and interruptions occasioned by earthslides in the Gaillard cut, made the growth of traffic slow and somewhat irregular. Figures for the traffic of the Suez Canal given in the preceding section show that the canal across the American isthmus could not rival in its early years the position of its older competitor for the world's trade. Even more impressive is a comparison with the figures of traffic through the Sault Ste. Marie canals, on the northern border of the United States. The cargo tonnage by the lake route in 1920 was over *eight*-fold that carried through the isthmus. The Panama Canal, to 1920, had just about paid the expense of operation and maintenance. There seems no question, however, that apart from important military considerations, the construction of the canal will be justified by the contribution that it will make to the commercial development of the Pacific.

365. The postal service about 1800. — Increased facility in sending communications to a distance has attended the improvement of the means of transportation by land and sea. During the early part of the century the postal service was still cramped by old methods and high charges. In England, for instance, in the period after 1827 and before the reform, postage of fourpence (eight cents) was charged for the carriage of a letter any distance not exceeding 15 miles, and the postage increased with the distance: 8 pence for 80 miles, 12 pence for 300, 15 pence for 600, etc. The government charged, in some cases, nearly five hundred times the actual cost. Under these conditions little use, naturally, was made of the post, and it carried, on an annual average, only three letters for each member of the population. Many letters were sent illicitly by private means of conveyance, and the postal revenue remained nearly stationary for many years before 1839, in spite of the growth of the country in population and business activity. Conditions were better in some states of the Continent, notably Germany, but would still be regarded everywhere as backward.

366. Postal reforms and their results. — A new era in the English postal system dates from the introduction by Rowland Hill of the penny post; after 1840 a letter weighing not over half an ounce could be sent to any place in the United Kingdom if prepaid by a stamp costing one penny. Similar reductions were adopted in other countries; and new facilities were extended for the mailing of cards, printed matter, and periodicals, samples of merchandise, etc. An international Postal Union was established in 1874 among the chief countries of the world, which agreed on common rates of foreign postage, and arranged to cooperate in carrying on the postal service. This Union has improved greatly the means of distant postal communication, and has grown to include practically the whole civilized world, with the exception of China.

It is easy to follow the effects of the various reforms and improvements in the increased use of the mails. In the United Kingdom, for instance, the number of letters sent per head of the population has increased as follows: 1839, 3; 1840, 7; 1872, 28; 1882, 35. The post has developed from a luxury into a social and industrial necessity, and the extent to which it is used in any country furnishes a fair index by which to judge of the country's advancement. The following countries may be taken as examples, the figures showing the number of pieces of mail sent annually about 1900, per head of the population: United States, 100; United Kingdom, 85; Germany, 81; France, 55; Italy, 17; Japan, 13; Spain, 12; Russian Empire, 5.

367. The telegraph before the application of electricity. — In passing to another subject, electricity, we may still consider ourselves as continuing the discussion of the applications of steam, so dependent are we still on coal and steam for the means of producing and using this new force. Among the manifold applications of electricity in modern life we must here confine ourselves to its use as a means of communication.

The telegraph, a word meaning "far-writing," existed long before men thought of applying electricity to its operation.

The need of sending messages quickly to distant places had led in many countries, before 1800, to a system of signaling by means of instruments much like the semaphores of the modern railroad. The crudeness of such a system is apparent. Communication depended entirely on clear weather and careful observers. Under favorable conditions the speed of signaling was really surprising; a despatch could be sent, for instance, from Paris to Strassburg, by 45 stations, in 6½ minutes. It was estimated, however, that of the messages received only a quarter reached their destination promptly, another quarter were from six to twenty-four hours late, while half had to be forwarded by the ordinary post. Aerial telegraphy, therefore, never attained to great importance, and was restricted largely to government business.

368. The electric telegraph. — Practical telegraphy dates from about 1840, when the inventions of the American Morse, and the Englishman Wheatstone, made the use of electricity possible wherever an insulated conductor could be laid. Imperfect as were the early instruments they accomplished their purpose with remarkable success. The telegraph, indeed, has probably undergone less change in the course of its extension and practical development than any other invention of equal importance. We must look, therefore, to explain the great extension of its use, as shown in the statistics at the opening of the chapter, not so much for technical improvements as for a recognition of the value of the telegraph on the part of the public. It found an immediate application on the railroads, and provided them with a means of intelligence and control almost as important as is the nervous system to a human being. It was used at once, moreover, by governments. Little by little it made its way into business life, where it has found its chief field of usefulness, and where it has effected some most important changes, to be noted later.

Since about 1880 the telephone has made a place for itself beside the telegraph, serving the convenience of individual consumers as the telegraph serves the needs of the great captains of industry and commerce, and constantly strengthening its position also as an instrument for the transaction of business.

369. Submarine telegraph lines. — The telegraph, which soon became of national and international importance, was still of restricted influence so long as it was confined to the land lines. Experiments on a modest scale, about the middle of the century, had shown the possibility of conducting the electric current through an insulated cable under water, and the world waited only for men of faith and energy to connect continents by submarine lines. A group of prominent Americans, of whom Cyrus W. Field was the leader, took up the project of an Atlantic cable, failed twice in their attempts to lay it, and succeeded in 1858 only to find, after a few days of successful operation, that the cable had ceased to work. The project rested during the Civil War, but in 1866 was finally accomplished. The extension of submarine cables since that time may be followed in the statistics of the preceding chapter. Cables now unite the peoples of all civilized nations, and form an indispensable part of the modern world of thought, politics, and commerce.

370. Wireless telegraphy. — To the men who were struggling to unite continents by electrical conductors the idea that connection for the purposes of communication could be established without any conductors whatever would have seemed an idle dream. Yet this result has been attained by wireless telegraphy. Electrical waves sent broadcast from a transmitting station affect delicate instruments "tuned" to receive them at a distance of thousands of miles, and enable messages to be sent across unsounded seas or untraversed deserts with equal facility. Wireless telegraphy has not displaced the older form, which still is and probably always will be more reliable in operation. For many purposes, however, it is a useful supplement, and for one important use it is an indispensable substitute. Wireless instruments can be established as readily on board ship as on land, and so permit ships to communicate with each other and with the shore. Ships can summon aid in time of emergency, and can regularly keep in touch with their agents so that their movements can be directed to suit the need of markets. In 1914 over 500 wireless stations had been established on land, and nearly ten-fold that number on board ship.

QUESTIONS AND TOPICS

1. American clippers. [Marvin, Amer. merchant marine, chap. 12; Clark, in Harper's Magazine, 1908, vol. 117, p. 92 ff.]

2. Is it probable that steamers will drive sailing vessels entirely from the seas? People once thought that railroads would cause a decline in the demand for draft-horses; has that been the case?

3. The life of the merchant sailor. [W. Clark Russell, Scribner's Magazine, July, 1893, 14: 3–19.]

4. Early voyages by steam across the Atlantic. [Fry, 33–42.]

5. Improvement of marine engines. [Thurston, chap. 5: Maginnis, chap. 11 (technical, good plates and pictures); Chadwick in Ocean steamships, pp. 1–56.]

6. The building of an ocean steamer. [Rideing, in Ocean steamships, pp. 91–111.]

7. Freight traffic by ocean steamers. [Gould, Scribner's Magazine, Nov., 1891, or in Ocean steamships, p. 217 ff.]

8. Passenger travel. [Same, Magazine, April, 1891, Steamships, p. 112 ff.]

9. Steamship lines of the world. [Hunt, Scribner's Magazine, Sept., 1891, Ocean steamships, p. 253 ff.; Encyc. Brit.]

10. Write the history of one of the great steamship companies: Cunard, Inman, White Star, North German Lloyd, Hamburg American, etc. [Fry, Maginnis.]

11. Engineering achievements in modern ports. [Vernon-Harcourt, chaps. 9, 10.]

12. The Manchester ship canal. [Vernon-Harcourt, chap. 13; Porritt in Yale Review, vol. 3, 295–310.]

13. The Corinth Canal. [Vernon-Harcourt, chap. 14; U. S. Monthly Summary, Dec., 1901.]

14. Construction of the Suez Canal. [Vernon-Harcourt, chap. 14; Encyc.]

15. Effects of the Suez Canal. [Fairlie; U. S. Monthly Summary, Dec., 1901.]

16. Effect of the Panama Canal on routes and traffic. [Hutchinson

gives a study of results as anticipated; see U. S. Statistical Abstract and periodical literature for actual results.]

17. Development of the English postal system in the nineteenth century. [Social England, 6: 237–246; Ward, Reign of Queen Victoria, 2: 118 ff.]

18. The railroad mail service. [Amer. railway, p. 312 ff.]

19. From the figures of trade given in sect. 319 and from the figures of population in the Statesman's Year-Book a table can be constructed giving the commerce per head of the people of different states, for comparison with the postal statistics in the text. Note, however, that these statistics include domestic mail, while figures of internal commerce are lacking. The U. S., for instance, would seem to have but slight commerce per capita, in spite of the active use of the mails, because the bulk of our trade is internal and does not appear in statistics.

20. Development of the telegraph. [Iles, chap. 13.]

21. Extension of the telegraph system in the United States. [Eckert in Depew, One hund. years, chap. 19.]

22. History of the submarine telegraph. [Iles, chap. 14; Charles Bright, The story of the Atlantic cable, N. Y., Appleton, 1903, $1; U. S. Monthly Summary, Commerce and Finance, Jan., 1899, pp. 1653–1675.]

23. Development of the telephone. [Hudson in Depew, One hundred years, chap. 20.]

24. Distribution of wireless stations. [Map in Statesman's Year Book, 1914, plate 4.]

BIBLIOGRAPHY

For carefully studied accounts of ocean transportation in its different aspects see Joseph R. Smith, * Organization of ocean commerce, Boston, 1905, The ocean carrier, by the same author, N. Y., 1908, and Emory R. Johnson and G. G. Huebner, * Principles of ocean transportation, N, Y., 1919. These books offer bibliographies which may be used to supplement references here given. On the development of sailing ships, beside the older books by Lindsay and Cornewall-Jones, see Adam W. Kirkaldy, British shipping, London, 1914, A. H. Clark, The clipper ship era, 1911, books by Basil Lubbock on ships of the clipper period, and references given later for American shipping; on steamships there are satisfactory accounts in Fry and Maginnis and in the collection entitled Ocean steamships. Excellent chapters on the different ship canals, with further references, are given in Johnson and Huebner. See also Lincoln Hutchinson, The Panama Canal, N. Y., 1915.

Summary accounts of the development of the postal service, satisfactory for the purposes of most readers of this book, will be found in the encyclopedias. A scholarly study of the development, particularly in the first half of the nineteenth century, is provided by J. C. Hemmeon, History of the British post office, Cambridge, Harvard University, 1912. The various applications of electricity are fully treated by Iles. Other books aiming to describe electrical applications for the general public are by Tunzelmann in the Contemporary Science Series, Park Benjamin, and Philip Atkinson. Consult the A. L. A. Catalogue for further references.

CHAPTER XXXII

THE WARES OF COMMERCE

371. Effect on commerce of technical progress. — It is now time to discuss the effects on commerce of the technical changes which have been described in preceding chapters. Following back the substance of those chapters, the effects may be briefly summarized as follows. First, an improvement in the means of communication and transportation which has brought men and goods of different regions vastly nearer to each other than they have ever been before in the world's history. Second, a control over the forces and materials of nature which has enabled men to manufacture old wares more cheaply and new wares which were before unknown. Third, as a result of the development of the transportation system, the settlement of new countries with virgin soil and rich mineral resources, and the connection of these countries with each other and with the countries of the Old World.

Of these three factors any one alone would be a powerful stimulus to trade; the three working together account for the astounding growth of commerce during the nineteenth century. Comparing the present and earlier periods we may characterize the advance by saying that in the Middle Ages commerce concerned itself almost entirely with the luxuries of life; that in the modern period (1500–1800) it served mainly men's comfort; while in the recent period, since 1800, it has become necessary to the very existence of a considerable part of mankind.

372. Growth of the sphere of commerce and resulting specialization of production. — The world has gone far toward realizing the ideal of the early free trader, that wherever a man might be, he should share in the productive advantages of all other men, wherever they might be. Customs tariffs have been able to check the movement of commerce; they have been powerless to stop it. The sphere of ordinary trade, which was once the manor, a mere hamlet or village; which grew in time to be the town with its surrounding country; then included the whole nation; and became in the modern period international, — this sphere of regular and ordinary trade is now the world. Whole countries now specialize in the production of different articles, as individuals or small districts once did.

Northwestern Europe has become a great factory, drawing its food supplies and raw materials from distant parts of the world, and exporting manufactured products in exchange. Beside Europe stands the continent of North America, supplying in large part the needs of its own people for manufactures, and producing a surplus for export. North America, indeed, stands in one aspect above Europe, for it has unexhausted stores of natural resources which it lavishes on other parts of the world less richly endowed. The other continents take subordinate positions. They are enabled by commerce to procure from Europe and North America the manufactured goods which they require, and specialize in the production of various food supplies and raw materials for the means of purchasing these goods.

373. Abolition of the slave trade. — The description of the present world-organization of production, and of the exchange of wares to which it gives rise, belongs to the department of commercial geography. It is proper here, however, to call attention to some of the marked changes in the wares of trade which have taken place since 1800.

One ware which was, before 1800, of great commercial importance, and which yielded immense profits to those who dealt in it, has disappeared with the abolition of the slave trade by all civilized nations. Long before the abolition of slavery itself, humanity revolted against the horrors of the "middle passage," and the protests took effective form about 1800; the states of Europe and America agreed, one after another, that the slave-trade under their flags, and for the supply of their territories, should cease.

374. The great wares of commerce. Coal. — For the purpose of a summary survey the most important wares of commerce before 1800 can be designated as belonging to the two classes, colonial products and textiles. We shall have to note, in ensuing sections, striking changes affecting both of these classes, and the addition to the important wares of commerce of two new classes, mineral products and foodstuffs.

Taking first the mineral products, and including coal with them, as common usage justifies us in doing, we find, at first sight, that this article takes a far lower rank among the modern wares than we should expect from its commanding importance in industrial life. There has been, it is true, a great growth in the coal trade, and considerable quantities are exported from England, Belgium, Germany, on occasion the United States, etc., for use in countries lacking coal mines, or at sea. There is an immense internal commerce in coal. In 1900 more than half of the tonnage carried on the railroads of the United States consisted of mining products; and of these coal certainly formed a very considerable, perhaps the major, part. Still coal does not rank among the chief wares of foreign trade.

375. Metals and Manufactures. — An explanation of the comparative insignificance of coal in foreign trade is found in its bulk. An active industrial people can compress the value of coal, as it were, by using it near the mines for the production and transformation of other materials. Coal is transmuted into iron and manufactures, and so loses its identity, though it remains still the real power behind the exports of that character.

Commerce in iron and steel, and the manufactures depending on them, has increased enormously in the course of the century, as the reader may readily suppose. Supplies of iron and machinery flow from the centers of production to the less advanced countries, and the simpler tools penetrate every nook and corner of the earth. Copper has grown greatly in importance, as its use for electrical appliances has extended, and now forms a considerable item in exchanges of countries like the United States and Germany.

376. Petroleum. — Nor is the new commercial significance of mineral products confined to the metals. In the last half century the trade in mineral oil (petroleum, "kerosene") has become a necessary part of the world's economy. One result of the great improvements in manufactures and transportation was a demand, from all sides, for more light. Artificial illumination was needed for the full utilization of machinery and means of transportation; and to provide light for the newspaper reading, study, and recreation to which people gave themselves in increasing numbers. The first half of the century witnessed many improvements: the invention of matches, the introduction of glass lamp-chimneys, the spread of gas lighting, and the use of new oils for illumination. No previous advance, however, compares in importance with the discovery that crude petroleum could be made the source of a cheap and efficient means of illumination. The development of the petroleum trade in the space of little more than a generation is a matter of common knowledge, and is readily explained by the importance of the service which it performs.

377. The grain trade; slight development before 1800. — Important and characteristic as the trade in mineral products has grown to be in the nineteenth century, it is still far from first place among the branches of the world's commerce. The primacy belongs, without question, to the trade in foodstuffs, especially grain.

Before the development of the modern system of transportation commerce in foodstuffs concerned itself largely with the condiments rather than the aliments, with spices and seasoning rather than the substantial food staples. Even at a freight rate of 15 cents per ton-mile (and the expense of transportation on European roads before 1800 was certainly far above that), wheat at $1.50 a bushel would be limited to a trade-radius of 330 miles; the whole value of the wheat would be consumed in transporting it that distance. Transportation by sea was, of course, much less costly, and enabled limited amounts of food to be imported under favorable conditions. Still, food has to be grown on land, and often on land distant from any means of water carriage; and the countries of Europe were forced in general to a policy of self-sufficiency, raising the requisite supplies of food at home under conditions however unfavorable. We may appreciate the short space of time separating us from this state of affairs by noting that in France, even in 1817, people were dying of famine in Lorraine, while wheat was abundant in Brittany; the carriage of provisions from one province to the other quadrupled prices. In Russia, even later (Pskov, 1845), the same conditions prevailed.

378. Extent and importance of the grain trade at present. — Grain formed, therefore, one of the least considerable of the wares of foreign commerce before 1800. A French economist estimated the international trade in grain at 30 million bushels at most. From that figure, comparatively insignificant, the grain trade of the world had risen, even in 1887, to over 1,500 million bushels; grain formed then, in value, almost one tenth of the total of the wares of trade, and in importance far exceeded any other ware. The expense of transportation had undergone such a vast diminution that one day's wages of a common laborer would pay for the carriage over a thousand miles of all the grain and meat which he needed for a year's subsistence.

It would be interesting, if time permitted, to note the far-reaching social and political effects of this revolution. We must, however, confine ourselves to its economic aspect. The English people, to take the most striking example, depend for more than half of their food supply, perhaps two thirds of their wheat supply, on imports from abroad. It is said that in every month in the year wheat is harvested in some country, of the northern or of the southern hemisphere, for the English market; a Floating Cargoes List reported 163 vessels bound for England with cereals, at sea at one time. As formerly the citizens of London depended on the farmer of a nearby county for the supply of his daily bread, so now the inhabitants of England in general depend upon people in the Dakotas, in California, in the Argentine Republic, in Egypt, in India, or in Australia. The Englishman is enabled, by commerce, to share in the agricultural advantages of any and all those countries; he applies himself to his specialty and exchanges the product for his food.

379. Commerce in other foodstuffs. — In some respects even more striking, though on the whole of far less importance, has been the growth of foreign commerce in stock and meat. About 1800 the common way of marketing meat was to drive it to market on the hoof; the trip might consume a number of days, and the animal would arrive in poor condition and with weight diminished. For transportation to distant countries meat had to be preserved by pickling in brine. Fresh meat of good quality was a luxury, and the average consumption of meat was small. Modern progress has solved the problem of using the great grazing spaces of North and South America and Australia for the supply of distant peoples, in two ways. Improvements in transportation by land and sea have allowed the carriage of live-stock for thousands of miles, in good condition. The use of refrigerating appliances, especially artificial refrigeration by means of steam power, has permitted the carriage of dead meat the same distance without deterioration. Furthermore, the application of scientific principles to the preservation of meat has enabled supplies of that article to be utilized which would otherwise be wasted, and has contributed a new form of ware to modern trade. Other foodstuffs (fruit and fresh vegetables) have profited by similar advances in the means of transportation and preservation.

380. The textiles; changes in relative importance. — In this brief survey only two more classes of wares may be noted, the textiles, and colonial products. Trade in wares of both these classes has undergone a great development and important transformation in the course of the century, though it presents no such revolutionary changes as in the case of wares described above.

The textiles have continued to be among the most important wares of commerce. A population, advancing rapidly not only in numbers but in average purchasing power, has demanded constantly increasing supplies of clothing material. There has been, however, a noteworthy change in the kind of fabric demanded. Measuring by the weight of the raw material consumed, the English textiles about 1800 were composed as follows: over two fifths woolen, over two fifths linen, considerably less than one fifth cotton. Note now the change as shown by conditions about 1880: wool made up one fifth of the total, linen little more than one tenth, while cotton had risen to two thirds. For some purposes cotton fabrics are better than those of any other material, for other purposes they present a cheap and satisfactory substitute; and consequently they have been able to displace other textiles to a large extent.

381. Commerce in raw materials for the textile manufacture. — The rise in importance of cotton is partly, not entirely, responsible for a great change in the character of the textile trade. With the exception of silk, which has always, because of its high price, been of restricted use, the raw materials for the textiles had formerly been produced in the country of manufacture. England and the Netherlands, it is true, had begun before 1800 to import wool from Spain, but wool was then an object of internal rather than foreign trade, in general, and flax was raised for home consumption in practically all the European countries. The introduction of the cotton manufacture in Europe introduced a change, for in the case of this textile the raw material as well as the finished product was necessarily a ware of foreign trade. The past century has witnessed a vast increase in the commerce in raw cotton, and, moreover, the establishment of an important trade in raw wool. In 1850 Europe still supplied four fifths of the wool consumed, and has continued since that date to produce about the same quantity as then. The proportion which it contributes to the total supply has, however, declined to less than one third. There has been an immense increase in the production of wool in South America and Australia, and a less notable advance in the amounts furnished by Africa and Asia. At the present time, therefore, raw wool flows to Europe from all the other continents, and returns to them in the form of finished goods.

382. Colonial products. — The last class of wares to engage our attention will be that of the so-called colonial products, of which tea, coffee, and sugar are familiar examples. The wares received their name because, before 1800, Europe depended entirely on distant parts of the world for their supply. The reader will remember what an important part they played in the commerce of countries like England and France, in the modern period.

At least one ware of considerable commercial importance has been added to the list of colonial products in the course of the century. Rubber (using that word to cover also gutta-percha, an article with somewhat different qualities), counted for little in commerce before 1830. Soon after that time, however, it was regarded as "promising," and the discovery of the vulcanizing process by Goodyear enabled manufacturers to gain the full benefit of its valuable qualities, elasticity, impermeability, etc. It is now an indispensable article in many applications, and though the production has risen to a hundred million pounds a year the demand for it has increased still more rapidly, and the price has risen.

The old wares have not only retained but also increased their importance as elements in human consumption. The people of Germany consumed, on an individual average, about 2 pounds of coffee in 1840, 6 pounds in 1900; 4 pounds of sugar in 1840, 30 pounds in 1900. Figures from other countries present, with some variations, the same growth in demand. The people of the United States now demand over

10 pounds of coffee *per capita*, and over 70 pounds of sugar.

383. Rise of beet sugar, and effect on commerce. — One of the colonial wares, sugar, demands special attention. The methods of production have undergone a complete change in the course of the century, and the former currents of trade in sugar have, in some cases, actually been reversed. Before 1800 people relied entirely for their sugar supply on the cane plantations of the colonies. It was known already, however, that beets contained a large percentage of sugar, and during the Napoleonic wars, when the Continent was closed in large part to colonial imports, an attempt was made to secure sugar from this native source of supply. The attempt was sufficiently successful to stimulate further efforts. With the aid of liberal protection from the governments a beet sugar industry was established on the Continent in the first half of the century. That industry supplied in 1860 one quarter of the total amount of the sugar of the world, in 1882 one half, in 1900 nearly two thirds.

The change in the method of manufacturing sugar has had far-reaching effects on commerce. Countries with cane plantations have seen the price of sugar fall under the increased output of European factories, equipped and operated with scientific accuracy; they have lost a large part of their former market; some of them have been almost ruined. England, which once made great profit by importing cane sugar and distributing it among the other European countries, now, on the contrary, goes to the Continent for the larger part of its sugar supply; and continental states like Germany and France export sugar instead of importing it.

384. The European sugar bounty system. — The reader should, however, note carefully that these changes were due in large part to a system of protection which had grown to formidable proportions. European governments have found in sugar a convenient object of taxation, but have desired at the same time to further the growth of the home sugar industry, and to secure for it a market in foreign countries. They have sought to combine the two objects by taxing the home consumer, and by remitting the tax and giving special premiums to the exporter. A pound of sugar cost far more in a country of Europe where it was manufactured, than in the country to which it was exported; every pound sold at home had to bear a tax, and every pound sent abroad received a premium which enabled it to be sold more cheaply. The orange marmalade industry, for which the town of Dundee is famous, could flourish in spite of the expense of transporting the fruit from Spain to Scotland, because sugar was artificially cheap in the English market. Such a condition of affairs was admitted to be unwholesome; in some aspects it became absurd. The burden of the bounty system became intolerable and the governments of the Continent agreed upon measures of reform, which went into effect in 1903.

QUESTIONS AND TOPICS

1. Make a brief written summary of the contents of preceding chapters under the heads of section 371.

2. On an outline map of Europe indicate areas corresponding to the sphere of commerce in different periods, with approximate dates.

3. Suppression of the slave trade. [Schuyler, Amer. diplomacy, N. Y., 1886, chap. 5.]

4. Recent slave trade in Africa. [Biography of a modern missionary or explorer.]

5. The coal trade at the close of the century. [Special Consular Report, No. 21, 1900, part 1, Foreign markets for American coal; U. S. Monthly Summary of Commerce and Finance, April, 1900, vol 7, no. 10, pp. 2815–2927, or Sept., 1902, vol. 10, no. 3, pp. 663–757.]

6. On the wares of 375 and the following sections prepare reports, indicating, where it is possible, the following points: total amount of the world's product; the leading countries (perhaps six), the share of each, and their relative advantages; the chief importing countries; peculiar characteristics of the trade. [Commercial geographies, encyclopedias.]

7. Report on one of the following topics:

(*a*) Development of the uses of petroleum.
(*b*) History of the production and transportation of petroleum.
(*c*) The Standard Oil Company.

[Martin, Coal; encyclopedias; Gilbert H. Montague, The rise and progress of the Standard Oil Company, N. Y., Harper, 1903, $1; Ida M. Tarbell, The History of the Standard Oil Company, N. Y., 1904.]

8. Indicate on an outline map the distance from your home to which wheat could profitably be carried by different means of transportation. [See below, sect. 387, for convenient statistics.]

9. Character and value of wheat. [Edgar, Story, chaps, 1, 2.]

10. Explain the great fluctuations in the export of wheat from the U. S. in the nineteenth century. [See statistics in U. S. Statistical Abstract.]

11. Wheat in modern commerce. [Edgar, Story, chap. 4.]

12. Provision trade of the world. [U. S. Monthly Summary, Feb., 1900, vol. 7, no. 8. pp. 2297–2347.]

13. American canning interests. [Judge in Depew, One hundred years, chap. 57.]

14. What amount does an American household, your own for instance, spend in a year for each of the chief textiles: cotton, wool, linen, silk?

15. The cotton trade of the United States and of the world. [See above, sect. 378, for suggestion of a simple mode of treating a large subject; the topic may be amplified as time permits. F. Wilkinson, Story of cotton, N. Y., Appleton, $1; S. J. Chapman, The cotton industry, London, 1905; George Bigwood, Cotton, London, 1918; statistics in U. S. Monthly Summary, vol. 7, no. 9, pp. 2543–2635.]

16. The wool trade. [John H. Clapham, The woolen industries, London, 1907; Frank Ormerod, Wool, London, 1918.]

17. Write a history of one of the following, as a ware of commerce in the nineteenth century: rubber, tea, coffee.

18. History of sugar as a commodity. [See the doctor's dissertation by Ellen D. Ellis, Philadelphia, 1905.]

19. What amount of tea, coffee, and sugar does your household consume in a year? (Note that sugar is frequently purchased in preserves, cake, etc.)

20. History of beet sugar, [Encyclopedias; index to periodical literature; U. S. Monthly Summary, Jan., 1902, vol. 9, no. 7, pp. 2585–2763.]

21. Some effects of the system of sugar bounties. [Charles S. Parker, Free trade and cheap sugar, Fortnightly Review, 1898, 70: 44–53.]

22. The Brussels sugar conference. [Economic Journal, June, 1902, 12: 217 ff.; same, March, 1904, 14: 34 ff.; Quarterly Journal of Economics, Nov., 1902, 17: 1 ff., Contemporary Review, Jan., 1903, 83: 75.]

BIBLIOGRAPHY

As this chapter touches the field of commercial geography I refer, for bibliography and general reading, to the current manuals on that subject: C. C. Adams, Text-book, N. Y., Appleton; G. S. Chisholm, Handbook, N. Y., Longmans; Joseph Russell Smith, Industrial and commercial geography, N. Y., Holt.

References in quantity sufficient for ordinary students are given in the Questions and Topics above; further references will be given when the history of the commerce of specific countries is considered.

CHAPTER XXXIII

THE MODERN ORGANIZATION

385. Qualities of modern commerce. Certainty. — The changes in the instruments and objects of commerce, described in preceding chapters, have had far-reaching effects on commercial methods and organization, to which the reader is now asked to give his attention. As a partial summary of what has gone before, and a preparation for what is to follow, modern commerce may be said to have made great gains in four important qualities: certainty, regularity, economy, sensitiveness.

In former times a merchant who gave an order involving the transportation of goods over considerable distances took a leap in the dark. He was fortunate if he could estimate with some accuracy the expense of transportation; he was almost helpless in estimating the time that would be consumed. So dependent were men on wind and weather, heat and cold, war and peace, and all the manifold conditions of nature and man, that loss was frequent and delay was constant. The element of chance, great by nature, was heightened by man; carriers were emboldened to make the most of their opportunities and to extort from the merchant all that the difficulties of his position might force him to pay.

Contrast these conditions, as they existed in the period before 1800, with conditions at the present time. The modern system of transportation has been likened to clockwork. The modern merchant feels aggrieved if a telegram is delayed a few minutes, a train a few hours, a steamer a few days. His expectations, indeed, are seldom disappointed, and even then he is often informed of the probable duration of the delay, and is enabled to prepare for it. The rates of transportation now are relatively stable, and, for the most part, are a matter of public knowledge. We have not yet reached perfection in this respect, as is shown by the wide-spread complaints against American railroad managers, but we have approached nearer to it than would have been imagined possible a century ago.

386. Regularity. — Certainty brings with it regularity. Steamers which are sure to arrive within a certain period can be advertised to leave on certain days. Merchants and producers are encouraged to make their preparations, and the whole body of people is stimulated to new activity and efficiency. Consider the following example, which, however trivial in itself, is typical of the course of development in the nineteenth century. "Before the establishment of steam-vessels, the market at Cork was most irregularly supplied with eggs from the surrounding district; at certain seasons they were exceedingly abundant and cheap, but these seasons were sure to be followed by periods of scarcity and high prices, and at times it is said to have been difficult to purchase eggs at any price in the market. At the first opening of the improved channel of conveyance to England (the steamer), the residents of Cork had to complain of the constant high price of this and other articles of farm produce; but as a more extensive market was now permanently open to them, the farmers gave their attention to the rearing and keeping of poultry, and, at the present time (1838), eggs are procurable at all seasons in the market at Cork, not, it is true, at the extremely low rate at which they could formerly be sometimes bought, but still at much less than the average price of the year. A like result has followed the introduction of this great improvement in regard to the supply and cost of various other articles of produce."

387. Economy. — As to the economy in the carriage of wares resulting from recent improvements much has already been said in other chapters, but the student may find in the following estimate, by a German author, a helpful summary. For $3 a hundred kilograms of wheat (220 pounds, a little less than 4 bushels) could be carried the following distances in kilometers (about five eights of a mile): on a common road 100, on a good road 400, on an early railroad 1,500, on a modern railroad 4,500, on an ocean steamer 25,000. There is little danger that the student will underestimate the advantage to commerce of this reduction in the cost of carriage, but he should note also the economy resulting from the speed and certainty of modern instruments of transportation. A considerable part of the world's capital, a century ago, was locked up in goods in transit or in warehouse. These goods were of no use to anybody. Nowadays not only are goods put where they are wanted, they are put there with such speed and certainty that merchants do not need to keep a large stock on hand, and the stock in transit is relatively small. In the India trade, for instance, when a voyage around the Cape of Good Hope took a good part of a year, and the time of arrival could not be calculated within a month or two, India merchants had to keep great stocks to meet the varying demand. Now that steamers make the trip by the Suez Canal in a month, and the time of their arrival is exact to a day, dealers order goods as they are needed, and the great India warehouses have been rendered in large part useless for their original purpose.

388. Sensitiveness. — The modern commercial organization has been likened to clock work, because of its regularity. Carrying further this comparison, it may be said that it is like a delicate chronometer, in which every movement is attended with the minimum of friction. The power of modern commerce appears in the vast quantities of wares which are exchanged through its agency; its sensitiveness is shown by the readiness with which the currents of trade are turned or even reversed to suit the occasion. It has been said that commerce turns from one side of the globe to the other on a difference of a cent on a bushel of grain, a dollar on a ton of metal, a quarter of a cent a yard on a textile fabric, or a sixteenth of a cent on a pound of sugar. So sensitive has the commercial world become to every stimulus that it feels also every shock. When the McKinley tariff bill was passed in the United States, it is said that the next day several thousand workmen, employed in the manufacture of pearl buttons in a city of far-off Austria, were thrown out of work. Brief interruptions of commerce, by the outbreak of epidemic diseases, by storms or other natural phenomena, or by strikes of workers engaged in transportation, rouse serious anxiety. The sensitiveness of modern commerce may be shown, further, by the refinements to which the principle of the division of labor has been carried. It is said that in the leather manufacture skins are sometimes sent across the ocean four times, to effect economies in subordinate treatments.

389. Importance of the telegraph, illustrated by conditions preceding its introduction. — While the various changes in commerce indicated above can be ascribed largely to the use of steam in transportation, they would be inconceivable, in their present form, if the electric telegraph had not been extended over all lands and under all seas.

The importance of the telegraph in commerce can be illustrated by conditions in Shanghai about 1870, before the cable reached that port. The rate of foreign exchange, a decisive factor in all commercial calculations, was at that time determined by European advices brought by post steamers. The news brought by one steamer would make the Chinese tael equivalent to 7.25 francs; on the arrival of another steamer the rate would rise to 8.10. As merchants bought in taels and sold in francs or other European currency, their profits and losses were largely dependent on variations in the rate. Two mercantile houses of Shanghai had found it worth their while to invest a large sum in the construction of special vessels, which could be made like modern torpedo boats, practically all machinery and hence very fast, as the only cargo they had to carry was a single letter, bringing from Singapore or Hong-Kong the European news affecting the rate of exchange, many hours in advance of the regular steamer. The few merchants who enjoyed the benefit of this news service had, of course, a great advantage over their competitors, buying and selling with full knowledge of what the rate would be. With the introduction of the cable, however, all merchants shared alike in such information, and, furthermore, by the continuous communication thus established, the former violent fluctations in rates became a thing of the past.

390. Services of the telegraph to the modern organization. — Newspapers spread broadcast the market quotations which are carried by the telegraph to all parts of the world, and the farmer in the American West, the cotton grower in the South, or the sheep raiser in Australia, can learn with ease what prices his staple brings in the great markets and what price he can ask for it. At the centers of business the great merchants, in touch, by the post and telegraph, with both consumers and producers, study to apportion the supply so that it will reach those who stand most in need of it, and seek to regulate future production so that there may be neither waste nor want when the product is brought to market. The remarkable progress of Brazil in coffee production has been explained by a student of the subject as due in large part to the spread of the telegraph in South America and the laying of a cable to Pernambuco in 1874, bringing the country into communication with the world's coffee markets.

The telegraph has, moreover, enabled commerce to dispense with a whole army of middlemen, commission merchants, and brokers, who were necessary under the old system, but who have now been released to find more useful employments. Merchants in the wool trade, for example, send their buyers to the countries of production on fast steamers, transmit their instructions by telegraph, and bring the wool directly to the country of consumption, cutting out entirely the middlemen of London, Antwerp, and Havre, who once controlled the trade. Before the first Atlantic cable was laid it cost about 3 per cent to get cotton through the hands of the commission merchant and broker; the cable did away with the old consignment system, and in a dozen years the charge was reduced to about 1 per cent.

391. Functions of the merchant. — I spoke above of the elimination of unnecessary middlemen. To many people all middlemen seem unnecessary, and fit only for elimination. These people regard as worthless drones all who are not engaged in the work of raising raw materials, of manufactures, or of transportation; they see no reason why a man who merely sits in an office, receives reports and writes letters, who perhaps rarely sees the wares he "handles," should grow rich off society.

The defence of the middleman may be given in the words of an English writer, describing the important part which merchants play in marketing the great output of the British iron industry. "The merchant usually has a better knowledge of the conditions affecting different markets than the producer. He comes more directly in contact with the buyer; he knows better to whom credit can safely be given, and is prepared to risk credits that the manufacturer would often refuse; he is well posted in railway and shipping rates and conditions, understands the peculiarities, practices, and requirements of particular markets, and has all other necessary commercial information, including freights and tariff duties, at his fingers' ends." Surely the functions thus suggested are sufficiently important to keep specialists employed, with profit to society as well as to the individuals engaged.

392. Growth in number and variety of the mercantile class. — In fact, the class of middlemen, those who are occupied merely in the exchange of wares, has increased greatly in the course of the century. The great commercial machine runs now with such power and smoothness, only by the help of myriads of men who get their livelihood by tending it. In Prussia, for example, the number of wholesale merchants or firms increased twenty-fold in sixty years.

The change would lack a large part of its present significance if it affected only the number of middlemen. It has been a change in quality as well as quantity. The increase in business has furnished the opportunity for a redistribution of tasks, and has led to a specialization which was before impracticable. To be a jack of all trades nowadays one must be a man of supreme genius; to be master of one branch of trade is sufficient for the energy and the ambitions of the ordinary man. It pays a few men to take the position of Charles Broadway Rouse, to offer to buy anything and to sell everything. Most wholesale merchants are content to confine themselves to one branch of trade: lumber, iron, wool, leather, grain, etc. Most of these merchants, moreover, rely further on specialists to help them with certain parts of their business. They depend constantly on the banker, the speculator, the broker, the forwarder, the warehouseman, the commission merchant, and agents of many different kinds. It is impossible, in this book, to do more than suggest the complex commercial organization which has grown up in the course of the century. Only a few of the most prominent features can be treated in the following sections.

393. Insurance and speculation — The practice of insurance has made us familiar with the means by which producers secure themselves against some of the risks of their business. A farmer can insure his growing crop against hail, a merchant can insure his stock against loss by fire, a shipowner can insure his vessel against loss at sea. For a small annual payment, which the producer can well spare, he secures himself against a loss which might prove ruinous, if it chanced to come to him. He gains relief from anxiety, strengthens his credit (he could not borrow on the security of uninsured goods), and secures that regularity of operation which is essential to the greatest efficiency.

So obvious are the advantages of insurance that every one accepts it as a benefit. We have now to see how the same service which is performed for the producer by the insurance company is performed for the merchant by the speculator. Among the greatest risks in commerce is that of price changes due to great events (wet seasons or dry seasons, war or peace, etc.) which the merchant can neither control nor foresee. A grain merchant, for instance, who has bought some excellent wheat in Dakota, has made advantageous arrangements for its transportation, and is confident of finding a ready sale to an English miller, may find the whole transaction results not in profit but in loss, if the level of wheat prices falls before his sale is accomplished, by reason, perhaps, of the unexpected yield of wheat in a distant country, or by the conclusion of a great war. Why does he not sell the wheat in advance to the miller, and so protect himself from this danger? He would simply be shifting the burden to shoulders still less able to bear it. The miller is a manufacturer, who needs to give all his thought to the technical details of his business, and who can ill afford to buy wheat when it is high, only to find when he comes to market the flour that it has dropped in price, in sympathy with a decline in wheat.

394. Services of the speculator to commerce. — The class of speculators has grown up in the course of the century, to assume such risks. It can do great harm to business by creating risks where none naturally existed, producing artificial scarcity by "corners," etc.; this danger should not blind us to the benefits it confers when it confines itself to its legitimate business. Let us see how, in practice, this business of speculation serves commerce.

A merchant who has bought wheat or cotton in America, for sale in the Liverpool market, sells immediately an equal quantity for *future delivery*, at a time when he expects to have his ware ready for sale in England. It makes no difference to him then whether the general price of his ware goes up or down. If prices go up he will have to pay more to "cover" his sale of futures, but he will also get more for his real ware. If prices go down he may not be able to get as much for his real wheat or cotton as he expected, possibly not as much as he paid for it; but he will make up just the difference, by the low price at which he can cover. He renounces all chance at great gains, but also secures himself against great loss, and is glad to pay the speculator's commission to attain this result. He makes his profit by the differences in the price of wheat or cotton not at different times, but in different places; reference to the section above, in which the description of the modern merchant was quoted, will suggest how he earns his living. In a manner similar to this many manufacturers (millers or cotton manufacturers) protect themselves against variations in the price of their raw material.

395. Decline of the market and fair, and rise of the produce exchange. — I spoke above of the regularity of modern commerce as one of its distinctive features. The gain in regularity shows itself notably in institutions like the market, the fair, and the exchange. The old system of market-days, under which country people came to town on stated days to display their wares and enable housewives to lay in a supply of provisions, has given place to a steady flow of products through city shops and market halls to the consumers. Fairs have lost their significance in modern countries, because the volume of trade is now so great, and the instruments of trade are so highly developed, that commerce has developed into one permanent fair. The great expositions, which began toward the close of the eighteenth century, but of which the London Exposition of 1851 (Crystal Palace) was the first of world-wide significance, seem to have continued to the present time the principle of periodical recurrence, but a tendency to permanence is to be noted even with respect to them. Many of these expositions have led to the establishment of museums of industry, art, and commerce, and the use of permanent expositions of models and samples has come to be a recognized means of furthering industry and commerce. Finally, the nineteenth century has witnessed the foundation of most of the modern produce exchanges, which have proved indispensable to the rapid development of commerce in the great staples. The experience of Hamburg is significant in this respect. The coffee trade of that port declined after 1882, when Havre adopted the system of dealings in futures, and did not recover until 1887, when Hamburg adopted the system also, and then enjoyed a rapid growth of the trade. These produce exchanges are to be found, with variations in the wares handled and in the system pursued, in all advanced countries. Germany, for instance, offers facilities for the characteristic trade of a produce exchange (including dealings in futures), in the following articles: wheat, rye, maize, oats, rye flour, crude alcohol, rape-seed oil, kerosene, cotton, coffee, raw sugar, granulated sugar, and carded wool.

396. Contrast of the character of association in commerce and in manufactures or transportation. — A previous section, describing the specialization of merchants in the nineteenth century, suggests the gain which commerce has made in the way of cooperation. The tendency, however, has been to split tasks up into small pieces, and to distribute these among individuals or small groups, rather than to associate great numbers of men under one management. We do not find in strictly commercial undertakings the tremendous aggregations of men and capital which have become characteristic of modern transportation and manufactures. Modern trusts, it is true, have invaded the field of commerce to a certain extent, and have effected some of their chief economies in improved methods of marketing their products. What the development may be along the line thus indicated is an interesting subject for speculation, but a subject which cannot be allowed to detain us here. Mercantile enterprises are still, for the most part, carried on by individuals, by partnerships, or by corporations in which the personal and local element is predominant.

397. More efficient utilization of capital in modern trade. — The middleman, therefore, cannot as a rule secure the capital which he needs for carrying on his business by offering securities for public subscription through the stock exchange. He seems, in this respect, at a disadvantage in comparison with the manufacturer, the railroad, or the steamship operator. He is, however, better off in at least two respects than his predecessors of an earlier time. First, he can do much more business with the same amount of capital than was possible under the old conditions. The great technical improvements have resulted in a much more rapid "turn-over" of capital, and a merchant now sells out and replenishes his stock far more rapidly than he could formerly do. The instance of the India trade, given in a section above, illustrates this fact. The "merchant princes" who once ruled this trade by their great capital have given place to many smaller merchants, who can make less capital suffice by its rapid turn-over.

398. Benefit of banks to trade. — Second, the deserving merchant can manage with a smaller capital than formerly, because he can borrow more easily and to much better advantage. The reader must be content with a summary of the results of the development of banking in the course of the century, for there is no space in which to treat the details of its history. Banks have followed business throughout the world. They have attracted the unused capital of the community until they control now a fund of enormous dimensions, available for mercantile loans. On the security of business paper (bills of exchange, bills of lading, drafts, notes, etc.), merchants secure the use of this capital, and find their means limited now only by the extent of their business. It is the function of the banker to judge of the soundness of this business, and to accord or withhold the use of the bank's money according to the promise of the enterprise. Mistakes are made, of course, but they are comparatively rare because a mistake in either direction compromises the bank's success. Special institutions, the commercial and credit agencies, have grown up since 1841, to aid bankers and merchants in this delicate task of judging the credit of individuals.

399. Criticism of the present organization; crises. — Of the general power and efficiency of the present organization there can be no question. It meets the supreme test of maintaining a population greater than in any previous period of the world's history, on a scale of comfort formerly unknown. That it is perfect, however, no sensible man believes. We cannot discuss the many criticisms directed against it from various points of view, but must not omit the consideration of one confessed weakness. The organization is wonderfully efficient in normal times, but it is unsteady. It passes, at intervals, through periods of feverish activity, culminating in a crisis and followed by dull stagnation. A curve showing the course of the world's trade during the century would not present a steady rise, but a series of waves, with distinctly marked crest and trough. There is a waste of labor and capital in all periods of a crisis. In the good times men strain themselves to build railroads where they are not needed, or to make machines for which there is no profitable use. Sooner or later they come to their senses with a shock, and realize that they have been wasting their time; then they are as depressed as they formerly were sanguine, and are too timid for a time to make good use of the capital which the crisis has left on their hands.

400. Crises before 1850. — The tendency of the commercial organization to these interruptions in its regularity of operation, which was apparent in advanced countries before 1800, has grown more marked in the nineteenth century; and, with the spread of the modern organization, crises now affect the whole world. Crises have occurred at intervals of about eleven years since 1800. A crisis marked the end of the Napoleonic wars in 1815. Another followed in 1825, occasioned, in England, by speculation in banks, turnpikes, and canals, and by unwise investments in South America. Commerce recovered from its depression only to decline again after the crisis of 1836-39, which was felt with particular severity in the United States in 1837. The last of the crises in the first half of the century, and the first crisis for which railroad speculation can be held largely responsible, followed in 1847, and was the more severe on the Continent because it coincided with a period of political revolution.

401. Crises since 1850. — Toward the middle of the century the new instruments of steam transportation began to work their great changes. At just this time, moreover, the discovery of gold in California (1848) and in Australia (1851) led to an immense increase in the world's stock of gold, which is said to have doubled in little more than ten years. The results, inflation and speculation, were as marked as though the new money had been of paper, and a period of over-trading ceased only with the outbreak of the crisis of 1857, which spread quickly from the United States to England and thence to the Continent.

A longer period than usual intervened, broken only by local disturbances (failure of a great English banking firm in 1866, "Black Friday" in the United States, 1869). The crisis of 1873 was, perhaps, on this account, more serious; it led to a depression of many years, affecting all branches of trade, and even distant countries like Australia and South America. Beginning, this time, on the Continent, where the outcome of the Franco-Prussian war and the payment of the great war indemnity had led to unprecedented speculation, it found a ready field in the United States, where there had been an active speculation in land and stocks, and proved to be the greatest international crisis which the world has known. As though the air had been cleared by this great storm, succeeding disturbances have been far more restricted in their action. A banking crisis in France in 1882 and a railroad crisis in the United States in 1884 were the chief events of the next period of danger; and in more recent times have followed the American currency crisis of 1893, and the German industrial crisis of 1901.

402. Rise in the price level since 1896. — Toward the close of the nineteenth century a change became apparent in the very basis of business, namely in the world's money in which prices are expressed. The prices of different commodities never rise or fall exactly in unison, but it is possible by statistics to show the change in the average of prices or the price level, as it is called; and a study of recent statistics shows a rise in prices so extensive and so rapid as to make it clearly a topic deserving serious attention from the student of commercial development.

Taking for the basis of comparison the average of prices in the decade 1890–1899, the price of staple raw commodities in the United States had risen in 1910 by almost 40 %; or, comparing 1910 with 1896, when prices were lowest, by 66.3 %, almost two-thirds. The change has been less marked in manufactured wares, for it has been offset to a certain extent by improvements in methods of production, but still it is very great: nearly 30 % compared with the decade before 1900, and over 40 % compared with 1896.

403. Effects of increase in the world's gold production. — Countless factors have contributed to this result, in one way or another, but economists are generally agreed that the one cause overshadowing all others is the increase in the world's output of gold. The metal which is the basis of the world's currency system has become so plentiful that it has cheapened; and the purchaser of wares has now to give more gold for them, that is, prices have risen.

From the time of the Californian and the Australian gold discoveries, for almost half a century, the world's annual gold output was curiously constant, at a figure somewhat over *one* hundred million dollars. The discovery of new gold fields and the perfection of new processes effected a revolution. The output of 1896 first exceeded the figure of *two* hundred million, in 1899 it passed the mark of *three* hundred, in 1906 and in succeeding years past 1910 it never fell below *four* hundred million.

While some classes in the community lose in a period of rising prices, particularly wage-earners and bond-holders whose income rises slowly in comparison with the increase in the cost of living, the speculators, merchants and manufacturers find in such a period a great opportunity to make money and business rapidly expands. The following pages will describe a noteworthy development of industry and trade in the period immediately preceding the World War; and the reader will realize, even when no reference is made to it, that the change in the price level has been an important factor in the development. One caution, however, seems at this point particularly advisable. Many of the statistics following, in which the development is pictured, are given in terms of money values. These figures grow with the rise in prices, even when there is no change in the physical amount of business transacted, and are an accurate index of the volume of trade only when they are reduced to an extent corresponding with the rise of prices.

QUESTIONS AND TOPICS

1. In the example given, sect. 386, distinguish the producer, the transporter, and the consumer. Show how each one of these gained by the advance in organization. Did any one lose by it?

2. Of what wares are large amounts still kept in storehouses, and why? [Cf. U. S. Monthly Summary, Oct., 1903, vol. 11. no. 4, pp. 1033–1095, Warehousing industry in U. S.]

3. Study, from newspaper accounts, the effect of an interruption of commerce by one of the causes suggested in the text.

4. Distinguishing producer, middleman, and consumer, show what has been the effect on each of the introduction of the telegraph.

5. Service of the postal system to commerce. [James in Depew, One hund. years, chap. 5.]

6. Development of the modern system of advertising. [Ayer in Depew, One hund. years, chap. 13.]

7. Nobody complains because the farmer who grows wheat or wool does not also make flour or cloth. Is there any good reason why the man who makes the flour or cloth should also market it?

8. Study the biography of some great merchant, and find out whether he made money out of people, or made money for people and kept only a share for himself. [James Burnley, Millionaires and kings of enterprise, Lond. and Phila., 1901; Fortunes made in business, London, 1884, 2 vols.]

9. Make a genealogical chart, showing how, from a single ancestor (the medieval artisan) the many specialists in modern manufactures and trade have proceeded. [Small and Vincent, Introduction to Study of society, contains a chart of this character, which may be used for guidance. See the U. S. Census or a business directory for suggestions of the present organization.]

10. If you have personal knowledge of some trade or manufacture, write a report on the development of its organization and the resulting specialization.

11. Write a report on the advantages to society of (*a*) fire insurance, or (*b*) speculation. [Hadley, Economics, chap. 4, or other manual of economics; H. C. Emery, Speculation on the stock and produce exchanges of the United States, N. Y., 1896, Columbia Studies, 7: 283–512.]

12. Write the history of any institution for periodical trade, like a market or fair, which has ever existed in your neighborhood. Has it any commercial importance at present? [Residents of the original thirteen colonies and of the older States will find in local histories and early legislation much information on this subject.]

13. The London exposition of 1851. [McCarthy, Hist., vol. 1, chap. 21.]

14. Write the history of some produce exchange. [Emery, Speculation; local history and biography, reports of the exchange.]

15. Note, in connection with sect. 394, that the industrial organization has become so complex in recent times that this book cannot follow out topics which were treated in earlier periods. For the importance of capital and of large scale enterprise at present see the books on economics, on railroads, trusts, etc.

16. Advantages of the modern department store. [Scribner's Magazine, 1897, vol. 21, p. 4 ff.; restrictions of space forbid the treatment of the organization of retail trade in the text, but many interesting and fruitful topics may be found in studying it.]

17. The business of a modern bank. [Scribner's Magazine, 1897, vol. 21, p. 575 ff.; manuals on economics and banking.]

18. The benefits of commercial and credit agencies. [Question bankers and business men; I find no historical treatment of the topic available in English.]

19. Character and course of a commercial crisis. [Manuals of economics.]

20. Write the history of some particular crisis. [Bibliography in Jones, Bowker and Iles, and Palgrave; consult narrative histories of the period, and periodical articles.]

21. Effect of the gold discoveries about 1850. [Rand, Ec. hist., chap. 10, from Cairnes.]

BIBLIOGRAPHY

This chapter touches so closely the field of economics that it seems unnecessary to duplicate the references which are supplied in abundance by the manuals on that subject. See for bibliography Bowker and Iles, and Bullock's Introduction to the Study of Economics, N. Y., 1897. A full classified bibliography of commercial crises will be found in Edward D. Jones, Economic crises, N. Y., Macmillan, 1900, pp. 225–245. The book which covers most fully the topics treated here is Wells,** Recent econ. changes. References on special topics are given above.

CHAPTER XXXIV

COMMERCIAL POLICY

404. War and peace in the nineteenth century. — Although, for the convenience of a round number, the date 1800 has been chosen in this book to fix the beginning of the recent period, the great changes which marked the passing of previous conditions began with the French Revolution of 1789. The effects of the revolution were soon felt outside the country in which it started. In a few years the powers of Europe were engaged in a war which, with slight intermission, endured for almost the period of a generation, and ceased finally only with the defeat of Napoleon at Waterloo. Since 1815 commerce has enjoyed singular freedom from the vexation of war, and our attention will be occupied in this chapter mainly with the commercial policy of states at peace. The convulsive struggle, however, in which the century began, has such importance, commercial as well as political, that it demands more than passing comment.

405. French privateers and English commerce. — The commercial interest of the revolutionary and Napoleonic wars centers in the contest between France and England. These two powers were the greatest commercial states of Europe, and France still retained important colonial possessions. England, however, had specialized in the development of sea power, while France now followed the course to which she had long been tending and sought to win the victory by the development of her power on land. After 1795 France abandoned the policy of maintaining great fleets to oppose the British, sacrificed the merchant vessels flying the French flag, and sought to destroy the commerce on which the life of England depended by sending out innumerable privateers to prey upon it. France enjoyed, apparently, an extraordinarily favorable position for making this policy effective. The port of London carried on more than half of British foreign trade; of the ships which contributed to its annual record of thirteen or fourteen thousand entries and departures, two thirds had to pass through the English Channel; and French privateers, sailing at sundown from a home port, could reach their cruising ground before it was light again. Some of the French privateers inflicted very serious loss on the British. A large one, captured in 1799, is said to have taken 160 prizes in four years, and to have cleared for her owners in Bordeaux five million dollars. English ships were forced to gather in convoys, sailing under the protection of ships of war. Fleets of 200 or 300 vessels were not unusual, and sometimes 500 or 1,000 were seen together, in dangerous places like the Chops of the Channel or the entrance to the Baltic. This system consumed the time and money of English merchants, and did not entirely prevent losses, which amounted perhaps to 2 per cent or more of the total volume of British trade. Still, the effort of France to crush her enemy by this means was clearly futile. France, on the other hand, saw her commerce decline until, as a literal fact, not a single merchant vessel flying the French flag was on the seas. In 1800 France received directly from Asia, Africa, and America less than $300,000 worth of goods altogether, and exported to those continents only $56,000.

406. Napoleon and the Continental System. — A new period in the war against commerce can be dated from the reopening of hostilities, after a brief interval of peace, in 1803. Napoleon, now the ruling spirit in France, found that a direct contest with the English on their own element, the sea, was hopeless. His schemes for the conquest of his great enemies may be summarized as follows: first, direct invasion, from which he was always deterred by the English sea power; second, a blow at England through her eastern empire, to which the Egyptian expedition was preparatory; and finally, the "commercial strangulation" of England by the exclusion of her goods from Europe. This last scheme, to which his efforts finally narrowed themselves, simply continued a policy which had already been applied in France, of excluding the wares and ships of British commerce. Napoleon was able, however, by his extraordinary successes on land, to extend the system of prohibition far beyond the bounds of France, and make it truly deserving of its name of Continental System. By 1809 he had closed to English trade all Europe except Turkey, Sicily, and Portugal. Decrees named from the place at which they were issued (Berlin, Milan), sought with savage thoroughness to stop all openings through which the English might carry on their trade and recruit their resources for the war against him. Commerce with Europe, according to Napoleon's plan, was to be carried on exclusively by his allies or by neutrals like the Americans; and the English, by being totally excluded, were to be starved into submission.

407. English reprisals; the position of neutrals. — To these measures England replied with various Orders in Council which matched in spirit Napoleon's decrees. As Napoleon sought to exclude England from European commerce, so England sought to drive the commerce of Napoleon's allies from the sea, and, furthermore, to make neutral commerce aid her in her measures against him. An order of 1807 required any neutral trading with the Continent to stop at a British station both going and coming, to land and reship the cargo, and to pay certain duties. Its purpose was to make England the center and warehouse of the world's commerce. Neutrals were placed between the upper and the nether millstone. In obeying the orders of either belligerent they exposed themselves to the punishment of the other. The merchants of the United States, who had profited by the early stages of the war to extend their commerce greatly, were forced into the seclusion of the embargo (to be described later), and were led in 1812 to the declaration of open war with England

408. Failure of the Continental System. — England scarcely needed political allies in a contest in which the material interests of most of the people of Europe were allied with her own. The obstacles to commerce with the Continent caused the prices of articles like the colonial wares to rise to double, triple, even tenfold, what they were in England. The reader will remember that the practical beginnings of beet sugar manufacture can be dated from this period of dearth. Commercial forces were too strong for any political restrictions, and smugglers brought goods to the people who wanted and would pay for them, despite all penalties. At a time (1809–10) when all the great ports from Riga to Triest were closed, goods reached the interior still, through the Greek islands, Malta, parts of Spain, the Channel Islands, and Heligoland. Napoleon himself had to recognize the impossibility of making the Continental System effective. He clad his own armies in English cloth, sold constantly licenses to evade his own decrees, and sought to win the profits away from smugglers by allowing the introduction of colonial products on payment of duties equivalent to the smugglers' gain. Certain branches of production and manufacture were furthered on the Continent by the restrictions on trade, but the Continental System, on the whole, resulted only in loss to the people and in the defeat of Napoleon's own plans. It furnishes a signal example of the futility of attempting to crush a sea power like England, without meeting it on its own element.

409. Effect of the war on England and France. — The effect of the war and the prohibitive system was necessarily injurious to British commerce, and showed itself in a decline of British exports. The injury, however, far from being mortal, was extremely slight. Smuggling was incessant, and if one opening to British trade was closed another was quickly found. When Holland became allied to France and hence closed to England, British exports to Germany increased rapidly; the German people were not consuming more British goods, but acted merely as distributing agents, through whom the goods reached their old markets. Napoleon could not forever coerce a whole continent, and his blockade was generally evaded in northern Europe, with the connivance of the governments, before 1810. On the last day of that year the Czar of Russia bade open defiance to the Continental System; and it crumbled beyond hope of repair after the failure of the Moscow campaign. Even the losses which England suffered were made up, in considerable part, by the profits which she secured from the expansion of neutral trade. England gained valuable additions to her maritime empire (Malta, Heligoland, Cape Colony, Ceylon, etc.), and entered the nineteenth century with her commercial primacy established beyond dispute. France, on the other hand, emerged from the struggle weakened at home and shorn still further of possessions abroad. Hayti (or San Domingo) had been lost by a native revolt; the Louisiana territory had been ceded to the United States; and some of her small islands had passed into the hands of England.

410. Other wars of the nineteenth century. — After the conclusion of this great war the world enjoyed a long interval of peace. The nineteenth century has been marked by internal political development, rather than by international strife. The growth of the spirit of nationality, the idea that people conscious of likeness in language, religion, etc., should be grouped under the same government, has led to several sharp struggles between states; but these have, in general, been short and of no great commercial significance. More important, from the commercial standpoint, has been the revolution in South America, which has enabled the people, formerly bound by the restrictions of the colonial system, to establish independent trade relations. Commerce was seriously affected, moreover, by the Civil War in the United States, which closed to the world for a few years its great source of supply of cotton. Other countries proved incapable of supplying the lack; a considerable portion of the English people (one fifth, it was said then), supported by the cotton manufacture, suffered from the stoppage of work; and consumers were forced to adopt other clothing materials, and did not, for many years, use cotton as freely as before. Of the other wars preceding 1914 the only one that had great economic significance was the war between Japan and Russia in 1905, which brought into the rank of the great powers an Asiatic country with far-reaching commercial ambitions.

411. Removal of old obstacles to commerce. — The greatest benefit which Europe enjoyed from the French Revolution and the ensuing wars was the removal of many remnants of feudal institutions which had persisted, petrified as it were, to this late period of history. Of these remnants none was more harmful to commerce than the feudal institution of the staple. This flourished especially in the German states, and resulted in depriving of a large part of their commercial value the German rivers, which were by nature the cheapest and best means of transportation. It was impossible to travel far on any German river without reaching a staple, where the boatman was subject to delay, inconvenience, and considerable expense. On the Rhine, for instance, there were thirty-two stations of this character where dues were still levied in 1800. As far as regarded the effect on commerce the flow of the rivers might as well have been interrupted by cataracts. It was a great step in progress, therefore, when these interruptions were removed, as little by little they were in the first half of the nineteenth century. The principle of free navigation was extended gradually to include important international rivers like the Scheldt and the Danube. The reader will remember that in the Middle Ages various countries tried to monopolize parts of the sea itself. Denmark had kept its hold on the straits leading into the Baltic Sea, and required ships to stop at Elsinore and pay toll, until 1857, when it sold out its right to levy toll on the payment of a lump sum by the countries interested in free navigation.

412. Customs tariffs; the prohibitive system. — The most important topic which remains to be considered in this chapter is that of commercial policy as shown in the customs tariffs.

The details of tariff policy must be left to later chapters, in which the different states will be considered separately; place can be found here only for a brief review of the general course of development, and for a consideration of some of the factors which explain the great changes.

Only a few years before the outbreak of the French Revolution France and England had agreed to a commercial treaty, which marked a great departure from the restrictive principles of the old mercantilist policy, and seemed to promise a new era of freedom in trade. The outbreak of war destroyed the new system almost as soon as it had been carried into effect, and changed the relations between the two states into that attitude of fierce antagonism which has been described above. The return of peace found the tariff systems of both France and England set in the old lines. The tariffs included a vast number of duties, both on imports and on exports; the rates were high and often prohibitive; the protection of national shipping by navigation acts was maintained. Similar characteristics marked the tariffs of other European states, and this period may fitly be termed the era of prohibition in recent commercial policy.

413. The period of free trade, 1860–1880. — The prohibitive system held its ground, however, only by force of custom and by the active support of small groups whom it favored. The writings of French and English economists, of whom Adam Smith was the great representative, had convinced thinking men that the people and countries of Europe would benefit by greater freedom of trade, and governments waited only for favorable conditions, political and economic, to lower their customs duties. The movement toward reform was at first local, finding place especially in England and Germany. Soon after the middle of the century, however, it became general in Europe, and led to such sweeping changes that the period extending, roughly, from 1860 to 1880 has often been called the free-trade period in commercial history. This was the time when the technical inventions, especially the application of steam on a large scale to manufactures and transportation, were first showing their full power in increasing productiveness. At this time a state which secluded itself commercially seemed to be renouncing the chance to share in the great movement of progress. Industrial states sought markets for their manufactures and sources of supply for their food and raw materials. Agricultural states found the offers for their surplus products too tempting to be refused. So many profitable openings appeared everywhere that there was little dread of competition and little call for protection.

414. Reduction of customs duties. — In this period, therefore, there was a general overhauling of the old tariffs. Export duties disappeared. Prohibitions were dropped, and import duties were reduced. Narrow restrictions, designed to favor merchant shipping, were reformed. Liberal commercial treaties became the fashion, and Europe was soon covered with a network of them after England and France had set the example in 1860. These treaties became of especial importance because they now included generally the clause of "the most favored nation," by which a participant in the treaty was assured that it should share, without delay and without need of recompense, in any favors that might be granted to other states. The slightest concession, therefore, effected a general reduction of duties in Europe. An English author, writing in 1882, found that in the period from 1860 to 1880 tariffs had been raised in only two of the sixteen European states. Apart from these two exceptions, which were not important, tariffs had undergone substantial reductions; of 2,140 items existing in 1860 only 136 had been raised, while 900 had remained the same and no less than 1,104 had either been lowered or removed altogether from the list. These reforms were undoubtedly responsible in part for the remarkable growth of the world's commerce in the period which they covered.

415. The return to protection. — The free-trade movement has been followed, in the last quarter of the century, by a decided reaction to protection. Since about 1880 increase in the customs duties has been the rule in Europe, and reductions have been exceptional. No single cause can be held responsible for this change. The growth of national feeling and of international tension in Europe since 1870 has undoubtedly disposed governments to listen more readily to the complaints of citizens who suffer from competition, and ask for protection against foreigners. Competition, moreover, has widened its range of action and become more keen. The countries which gained new markets for their agricultural products, and flourished during the period of development of steam transportation in Europe, have lost their foreign markets and find their home markets menaced, as the transportation system has grown to embrace other continents and now brings cheap products from across the seas to the door of the European consumer. Countries which willingly accepted the manufactures of advanced industrial states when their own industries were in a primitive stage of development have since aspired to establish modern factories of their own at home.

In spite of the return to higher duties the present protectionist policy has retained many of the changes of the period of free trade. The statesmen who guide the commercial policy of European countries have discarded prohibitions, and use duties discriminating against particular countries only exceptionally. Down to the close of the century they have continued to grant to nations in general the treatment accorded to the most favored nation, and in some ways have extended the scope of this practice. The general level of duties, moreover, though it may seem high in comparison even with the general average of the period of prohibitions, offers a much less effective bar to trade, because of the reduction of the expense of transportation. It is impossible to state accurately the relative height of various tariffs. The following table gives an estimate of the tariffs on some important manufactures towards the close of the century: Russia 130 per cent, United States 72 per cent, France 30 per cent, Germany 25 per cent, Belgium 13 per cent, New Zealand 9 per cent, etc.

416. Colonial policy. — Colonial policy, a topic which has had for some years a leading place in public discussion, can receive only brief consideration in this history. The colonial ventures of the recent period may in time bring forth the commercial results which their projectors promise; up to the present the results have been small. Until far into the century European governments showed little interest in the expansion of their people or the extension of their power in distant parts of the world. Their attention was absorbed by the problems of domestic and foreign policy in Europe. The colonial question, however, like every other political and economic question, assumed a new aspect under the changes wrought by steam and the telegraph. Distant continents were, by those changes, brought nearer to European capitals than parts of the home territory had been before. The immense increase of transmarine commerce which marked the latter part of the century was carried on largely by English-speaking people, and seemed to promise to states of the Continent similar results if they could spread broadcast their people and power as England had done. The best parts of the world had already been occupied, it is true, but great stretches of territory were still free from claimants of European descent. France began to raise her flag over new territory in Africa, Asia, and Oceanica; the Belgian king established his authority in the region of the Congo; the movement quickened to a scramble in the '80's; and soon all parts of the habitable world except certain countries in Asia and Africa had been brought under the sovereignty of European powers. The colonial question — what to do with these possessions now that they have been secured, how to govern them — has not yet become a part of history; it is still a question of the day.

QUESTIONS AND TOPICS

1. Prepare a chronological table of the wars of the nineteenth century, from a manual of recent history.

2. The English navy during the Napoleonic wars. [Social England, vol. 5, pp. 391–401, 541–544; the sea stories of Captain Marryat.]

3. The Continental System and its effects. [Levi, Hist. Brit. commerce, part 2, chap. 4, reprinted in Rand, Ec. hist., chap. 5; Rose in Kirkpatrick, Lectures on hist. of nineteenth century, Cambridge, 1902, 59–78.]

4. Effect of Napoleon's commercial measures on British finances. [Audrey Cunningham, British credit in the last Napoleonic war, Cambridge, 1910.]

5. The question of neutral rights. [Schuyler, Amer. diplomacy, chap. 7; Reeves, Two conceptions of the freedom of the seas, in Amer. Hist. Rev., April, 1917, 22: 535–543.]

6. The movement for independence in South America, and its commercial results. [Helmolt, Hist. of the world, vol. 1; History of South America, transl. by Adnah D. Jones, London (N. Y., Macmillan), 1899.]

7. Free navigation of European rivers. [Schuyler, Amer. diplomacy, chap. 6, p. 345 ff.]

8. The Sound Dues. [Same, p. 306 ff.].

9. Divide your graphic chart of commercial statistics into blocks, to correspond with periods of commercial policy; dates may be chosen as follows, 1800, 1860, 1880, 1900. Be cautious, however, about any conclusions that may suggest themselves.

10. Relative share of different factors in recent commercial progress. [Cf. W. E. Gladstone, Free trade, railways, and the growth of commerce, Nineteenth Century (Magazine), Feb., 1880, 7: 367–378; but do not regard this article as settling a problem still unsolved.]

11. Significance of the "most favored nation" clause in tariff history. [Reciprocity and commercial treaties, 389–416.]

12. Various systems of tariff policy. [Reciprocity and commercial treaties, 461–467.]

BIBLIOGRAPHY

The best single reference on the commercial conditions and policy of the Napoleonic period is Lingelbach, * Historical investigation and the commercial history of the Napoleonic era, in Amer. Hist. Rev., Jan., 1914, 19: 257–281; this provides a scholarly survey of the whole literature of the subject and can be used as a guide to further study. Of later works should be noted Frank E. Melvin, Napoleon's navigation system, Univ. of Penn. thesis, 1919, N. Y., Appleton.

On commercial policy in general the best reference is Bastable's ** Commerce of nations, which treats international trade, the theory and the history of commercial policy briefly but with admirable clearness. The history of the commercial policy of particular countries will be covered in following chapters. A survey of modern tariff systems is provided in * Reciprocity and commercial treaties, published by the U. S. Tariff

Commission, Washington, 1919; J. W. Root, Tariff and trade, Liverpool, 1898, combines a general discussion of the tariff question with a review of the tariff policy of important commercial countries.

Colonial policy can receive but scant treatment in this book. The student is referred to the bibliography by A. P. C. Griffin, List of books relating to colonization Washington, second ed., 1900, and to the references there given.

CHAPTER XXXV

ENGLAND: COMMERCIAL DEVELOPMENT, 1800–1850

417. Importance of the commerce of England. — In returning to the study of the development of commerce in different countries we shall take up first the country which at the beginning of the nineteenth century, and at its end as well, held the leading position, England. An English author has made the statement that "in the eighteenth century foreign trade was of so little importance to the majority of the inhabitants of England, that with one important exception (wheat) the whole of it might have been destroyed without making any appreciable change in the habits or wealth of the people." This statement is an exaggeration which can hardly be supported, but yet it suggests a truth of great importance; English commerce in 1800 was merely an aid to the development and welfare of the country, while it had become in 1900 absolutely necessary to the mere existence of the people.

418. Statistics of the growth of commerce, 1800–1850. — The period of most rapid growth was the second half of the nineteenth century, and this period will be reserved for special consideration a little later. The development in the first half of the century is set forth in the accompanying table, which gives the figures for imports retained in the country, and for the exports of home produce, according to the system of valuation in use in this period, with the sum of these items.

As the population doubled in this period it is apparent that foreign commerce, which more than doubled in value, was taking a more important place in the national economy than before. In the first quarter of the century, when England was passing through the struggle of the Napoleonic wars and was recovering from their effects, trade was nearly stagnant, but it made up in the twenty-five years that followed for the time that had been lost before. If we measure commerce not by the value of the wares, but by their physical quantity, the increase was far more striking; prices of many articles, especially of the manufactures exported, fell during this period, and consequently the same bulk of trade would be represented by much smaller figures in pounds sterling. If we returned to the old method of measuring trade, which retained "official" values that did not change with the movement of market prices, and which therefore affords a means of measuring an increase in the bulk of trade, we should find, comparing the two years, 1800 and 1849, that exports grew from 24 million to 190 million pounds sterling, giving the enormous increase of 682 per cent.

ANNUAL AVERAGE TRADE OF THE UNITED KINGDOM
(Millions of Pounds and Dollars)

	Imports		Exports		Total	
1801–05	£28	$140	£33	$165	£61	$305
1806–10	30	150	37	185	67	335
1811–15	29	145	45	225	74	370
1816–20	20	100	40	200	60	300
1821–25	26	130	37	185	63	315
1826–30	33	165	35	175	69	345
1831–35	36	180	40	200	76	380
1836–40	47	235	50	250	97	485
1841–45	57	285	54	270	111	555
1846–50	72	360	60	300	133	665

419. Change in the relative importance of different exports. — We can expect, by studying the details of exports in this period, to find the branches of production in which the English were strong enough to enable them to supply other people and to extend their commerce. Taking the figures for 1850, we find the evidence of some important changes. The old staple of the English export trade, woolen manufactures and yarn, had increased since 1800 in value, and still more in quantity. It had ceased, however, to be the standby of the English exporter; this item formed now less than one seventh of the exports instead of over one fourth. It had been thrust into the second place by the rival textile cotton, which had become, as it was destined to remain throughout the century, the leading item among English exports. Cotton yarn and manufactures made up 28 out of a total of 71 million pounds sterling. Among other changes in the list we note the growth of the iron and steel, the hardware and the coal exports. Some items are interesting because they are still so small; among those which remained below the million-pound mark were steam-engines and machinery, pottery, and tin plate.

420. Development of English manufactures. — It is apparent that this period was marked by a rapid development of English manufactures. Taking two manufactures, typical of an advanced industrial state, iron and cotton, we find that the increase in production is estimated at over tenfold or more than 1000 per cent; as the quantity of population had merely doubled it is apparent that its quality, or the character of its occupations, underwent a revolutionary change. It is, in fact, in this first half of the nineteenth century that the enormous possibilities latent in the inventions of the eighteenth century became apparent and were realized. The great inventions were not enough, in themselves, to transform industry. They needed to be developed by practical business men, who could secure the necessary capital to utilize them to the best advantage, who had the talent for organization enabling them to build up an efficient force of laborers, who could stimulate further technical improvements necessary to supplement the great inventions, and who could develop a mercantile system enabling them to buy and sell large quantities to good advantage. Some English manufactures remained "domestic" industries carried on in the home of the workman, but the most important advanced to the factory system, and were thus enabled to get the full advantage from technical improvements.

421. Introduction of machinery. — It is in this period that the knowledge and experience necessary to the proper handling of machinery spread from narrow circles to broad groups of men. The market for machinery was thus established, and the manufacture of tools and machines underwent a corresponding development; in 1836 it was "difficult to point out any leading mechanical process, the details of which have not been, by this means, simplified, and the article produced brought nearer to perfection." Inventors from other countries sought British shops to perfect their devices, and British factories in which to introduce them. Some of the best textile machinery of this period was invented in the United States and other countries, but was first put to practical use in England.

422. Steam power and railroad transportation. — It is in this period, also, that the steam-engine became a practical force in English manufactures. The steam-engine had been introduced in Birmingham in 1780, but the number of engines in that rising center of manufactures was in 1815 only 42 and in 1830 still only 120, while in the nine years following the number rose to 240, or doubled. In 1835 the textile factories of England employed only a little over 50,000 mechanical horse-power, and of this total nearly a quarter was still obtained from water-wheels. The beginnings of transportation by steam railroads can be dated, as said before, from about 1830.

423. Gradual development of the cotton manufacture. — The statement in a previous paragraph, that time was needed to develop the inventions before they could be made to serve the interests of manufacturers and merchants, is borne out by the history of the most important manufacture, that of cotton. Most of the basic inventions in cotton machinery were made in the last quarter of the eighteenth century. As early as 1812 a man, using the improved appliances, could produce 200 times as much as could be got from the old spinning-wheel. Yet it was not until 1820 or 1830 that cotton-spinning machinery had been practically developed and introduced on such a scale that the yarn exports began to show the full strength of this new force; while power weaving came even later, and the exports of cloth increased most rapidly in the second quarter of the century. Other processes connected with the textile manufacture present the same history. Cotton printing, for instance, had been practised in the eighteenth century, but in 1800 only 32 million yards a year were printed, while in 1830 the figure had risen to 347. The growth of the cotton manufacture was reflected in the development of towns like Manchester, Bolton, and Liverpool, which increased immensely in population.

424. Character of the import trade. — It will be instructive to glance now at the other side of England's commercial balance sheet, and observe the wares imported about the middle of the century. In 1854 the values were as follows, in round millions of pounds sterling: total 152.3, of which the chief items were grain 21.7, raw cotton 20.1, timber 10, sugar 9.6, raw wool 6.4, tea 5.5, raw silk 5.3. While it is not safe to make a direct comparison between these values and those given previously to show conditions about 1800, a striking change is apparent in the relative rank of the items. A great growth in the importance of the imports of breadstuffs is noticeable. We shall see a little later that the English in this period gave up the attempt to produce their food at home, and resigned themselves to depending on foreign countries for supplies which they could purchase with their manufactures. Wares like sugar, tea, coffee, and tobacco had declined in relative importance. The actual amount of these commodities imported for consumption at home had increased much more than would appear from a comparison of the figures, and their use was constantly extending among the common people; but they were now overshadowed in trade by other items. The chief group of imports was formed of raw materials for the English textile manufacture. The cotton imports, had, of course, grown immensely; the home supply of wool, which had been almost sufficient for manufactures in 1800, needed now to be supplemented by large imports from abroad; silk had taken the third place on the list of textiles away from flax and hemp.

425. Increase in importance of trade with distant continents. — If we attempt to trace the changes in the direction of English trade in the first half of the nineteenth century, we find, in the maze of figures presented for study, some facts standing out as evident and important. The trade with other countries in Europe grew steadily, but grew slowly as a rule, and did not keep pace with the progress which English trade was making in other parts of the world. Most of the continental states looked with jealousy on England's industrial development, and checked the free exchange of commodities by severe restrictions. We must look outside of Europe for the field of expansion of English trade. Africa still remained unimportant from the commercial standpoint, but America, Asia, and Australia dealt in increasing measure with the British merchant.

426. Great importance of the trade with the United States. — The United States was, far and away, England's best customer, taking, near the beginning of the century, when the ports of the continent were closed by Napoleon, as much as one third of the total English exports, and at the middle (1849) nearly one fifth. "It affords strong evidence of the unsatisfactory footing upon which our trading relations with Europe are established," wrote an English author in 1838, "that our exports to the United States of America, which with their population of only twelve millions are removed to a distance from us of 3,000 miles across the Atlantic, have amounted to more than one half of the value of our shipments to the whole of Europe, with a population fifteen times as great as that of the United States of America, and with an abundance of productions suited to our wants, which they are naturally desirous of exchanging for the products of our mines and looms." The United States paid for the wares by an export mainly of raw materials, and expecially of cotton.

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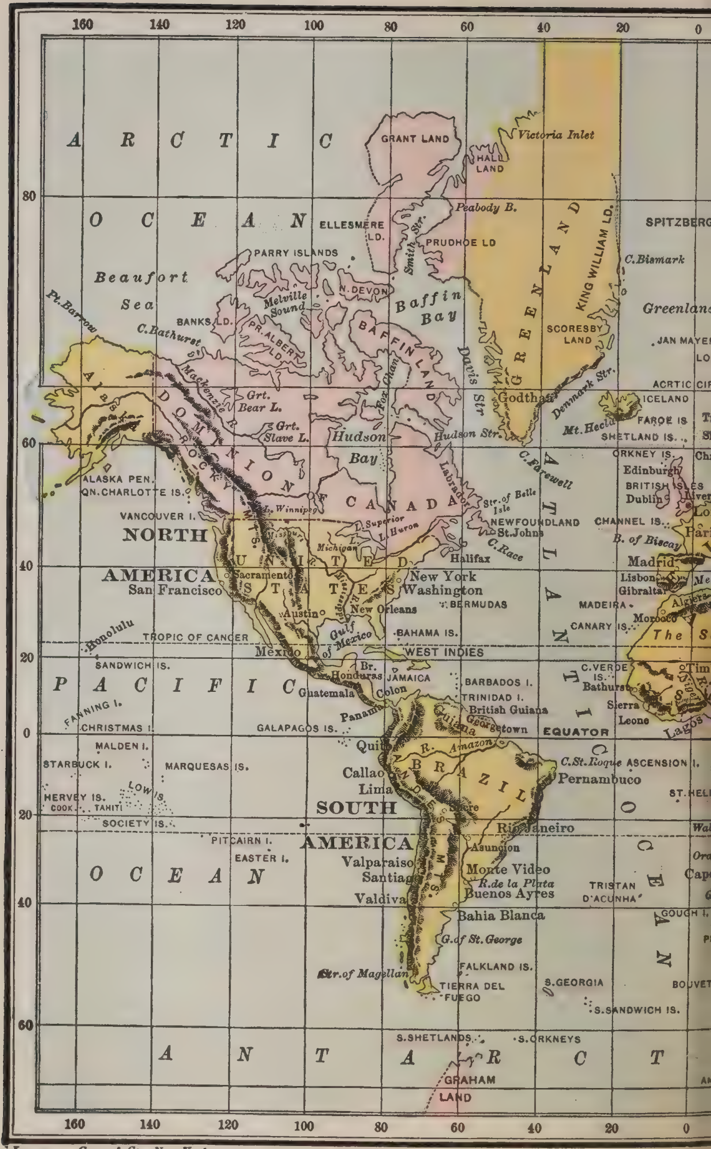

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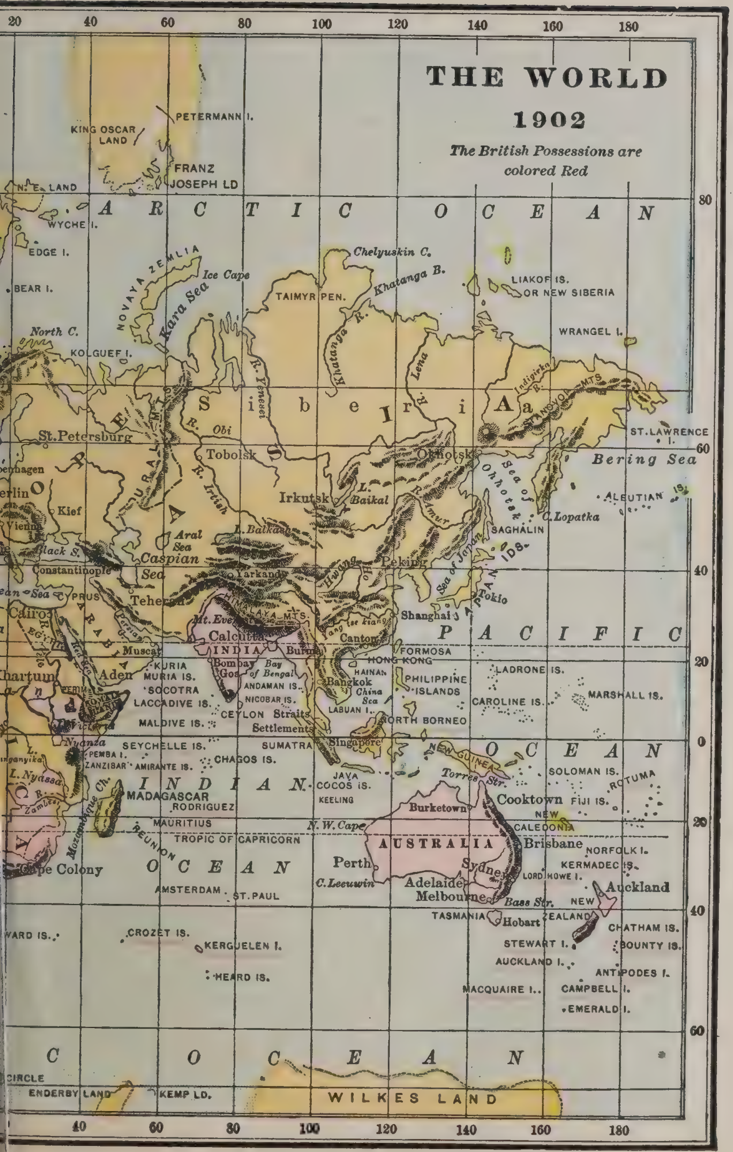


THE WORLD

1902

The British Possessions are colored Red

During most of this period England drew three fourths of her supply of raw cotton from the southern States.

427. Trade with other distant countries. — Other American countries were good customers of the British manufacturer; Brazil, for instance, bought more from England in 1849 than did England's nearest neighbor, France. Among other independent states China deserves mention. Trade with that country had been included in the monopoly of the East India Company until 1834, when it was thrown open to British merchants in general; the trade grew rapidly thereafter, but suffered from the restrictions imposed by the Chinese until, as a result of the so-called Opium War of 1842, the English secured the cession of Hong-Kong and the opening of a number of ports.

428. Trade with British dependencies: India. — In 1850 between one fourth and one third of the exports of the mother country were sent to British dependencies. Among these British India, almost a continent itself if we consider its area, its population almost equal to that of Europe, and the complexity of its peoples, took the leading place. British India alone took about one tenth of the English exports. So long as the trade with this country was controlled by the East India Company it remained small; and the company declared that because of the backwardness and peculiar customs of the natives it could not be increased. The privilege of trading with India was granted to individual merchants in 1793, but under such burdensome restrictions that it led to slight results; and the nineteenth century opened with the Indian trade still but a small item in England's total. In 1813, however, the trade was at last thrown open, and the effect was immediately manifest; in the first year of the new policy private merchants exported more than did the company, and soon they had developed the trade to an extent undreamed of by the monopolists. India proved to be just the country which English merchants were seeking as a market for the expanding cotton manufacture. In the eighteenth century protection was demanded in England against the competition of Indian textiles, but soon the tables were turned, and manufacturers in India complained that they were being ruined by the importation of English cotton goods; about 1850 British India took more cotton manufactures than any other country, and nearly one sixth of the total exports of this most important commodity of England.

429. Colonies in North America and Australasia. — Next in importance to British India came the two groups of the North American and the Australian colonies. The colonies on the continent of North America were, in spite of their political allegiance, a far less important market than the republic on their southern border which had declared its independence in 1776. They supplied, however, a fairly steady and a growing demand for English products which put them in sharp contrast with the West Indian colonies. These island colonies had been, in the early part of the century, the field of rich returns in trade, but their productiveness depended on a system of slave plantations, and when slavery was abolished in them in 1833 their commerce declined rapidly.

Thanks to the wide extent of her colonial dominions, England could hope to gain in one part of the world if she lost in another, and the development of the Australian colonies in this period promised to atone for any decline in the West. The British flag was first raised in Australia in 1788. The young colonies were out of the track of the trade of the time, and seemed of such small importance that one was made a penal settlement, but the natural resources, especially the fitness for sheep-raising, induced a steady growth of population, and a considerable trade, even before the gold discoveries in the middle of the century.

QUESTIONS AND TOPICS

1. What do we mean when we speak of the "importance" of a country's commerce? The reader who reflects upon this question will find that at least three different standards are taken to measure importance.

(1) Mere bulk or value. The commerce of the British Empire would be called the most important in the world, because it is larger than that of any other state. (2) The needs of the people of the country. A considerable number of Englishmen would starve without commerce. In this sense commerce is even more important to the miners of Alaska, for they would practically all starve without it. (3) The needs of other countries for the exports of a given country. In this sense the United States has perhaps the most important commerce in the world, because it supplies so much of the world's need for cotton, copper, foodstuffs, etc.

Endeavor to find examples, in this book or in others, of the different uses of the word; apply it in different uses to different countries.

2. Treat the statistics in sect. 418 as suggested previously, by graphic representation. How did British commerce compare in growth with world commerce? Did England keep her share in the world's trade? Try to find in English history reasons for the ups and downs of trade, and for its gains and losses in comparison with the world's trade. Beware, however, of hasty conclusions; many pitfalls are concealed in commercial statistics. In the table in the text, for example, the early figures are those of total exports and imports of merchandise, including wares simply passing through English hands to foreign customers; the figures for 1816 and the following years show only exports of British produce and manufacture, and imports retained in the country. This change in the method of measurement, rather than the crisis following the Napoleonic wars, explains the drop in the figures. This last method of measurement will be followed in later tables.

3. The following list gives the value, in millions of pounds, of all items over 1.0, in total exports of 71.3. Coal, etc., 1.2, cotton yarn, 6.3, cotton manufactures 21.8, haberdashery and millinery 1.4, hardware and cutlery 2.6, linen manufactures 3.9, iron and steel 5.3, woolen yarn 1.4, woolen manufactures 8.5. (If various other items were grouped we could add: copper about 2., silk about 1.)

Arrange these items and represent them by spaces on a line, for help in realizing their relative importance, and for comparison with earlier and later conditions. [See Statesman's Year-Book for present trade. Note that these items include only home produce and manufactures, so foreign produce, such as colonial wares, should be excluded in making the comparison with another period. Statistics of this period give only quantities, not values, of foreign and colonial merchandise exported. Values of foreign and colonial merchandise exported are available for 1854 and the following years. In 1854 the items over one million pounds were: cotton 2.3, indigo 1.2, wool 1.4. Among the items under one million were: coffee .7, wine .7, raw silk .7, tea .5, rice .5, guano .5, raw sugar .3, unstemmed tobacco .3. What changes are suggested by these figures, in comparison with those of about 1800?]

4. Review the substance of sections 245 ff., or read the account of the great inventions and their effects in Rand, Ec. hist., chap. 2.

5. Mining and metal production up to 1846. [Traill, Soc. England, 6: 194–199.]

6. Coal mining. [Same, 6: 367–379.]

7. Development of the English transportation system. [Same, 6: 199–211; McCarthy, Hist. vol. 1, chap. 4; Ward, Reign, 2: 83–111.]

8. Development of the textile manufactures. [Soc. England, 6: 69–75.]

9. Study the items in sect. 424 in the way suggested for sect 419.

10. Review sect. 412, on the tariff policy of the period in Europe; note that the United States had a low tariff, and that trade in the other continents was practically free.

11. The Opium War. [McCarthy, Hist., vol. 1 chap. 8; Robert K. Douglas, China, N. Y., Putnam, $1.50, 1899, chap. 8.]

12. East India Company in the nineteenth century. [Willson, Ledger and sword, vol. 2, chaps. 12, 13.]

13. Commerce of British India. [William W. Hunter, The Indian Empire, third ed., London, 1893, chap. 19; same author, The Marquess of Dalhousie, Oxford, 1890, chap. 10.]

14. The Hudson's Bay Company in the nineteenth century. [George Bryce, Remarkable history of the Hudson's Bay Company, N. Y., Scribner's, 1900; Willson, The great company, London (N. Y., Dodd), 1900, vol. 2, chap, 36; G. R. Parkin, The great Dominion, London, Macmillan, 1895, chap. 8.]

15. Slave plantations in the British West Indies. [A. K. Fiske, The West Indies, N. Y., 1899, chap. 10; James Rodway, The West Indies, London (N. Y., Putnam), chaps. 7, 10; F. W. Pitman, Development of the British West Indies, New Haven, 1917, chap. 1.]

16. Emancipation of the slaves and its results. [Rodway, chaps. 14, 15.]

17. Development of Australia. [Encyclopedia; Helmolt, Hist. of World, vol. 2, p. 252 ff.]

BIBLIOGRAPHY

Useful references can be obtained on England, as on other countries to be considered later, by consulting the Subject Index of the British Museum Library for books published since 1881, and the A. L. A. Catalogue for books in print, of a popular character.

Of the general histories of England in the nineteenth century, that by * Spencer Walpole, 5 vols., London, Longmans, 1878–86, devotes considerable attention to economic developments, and is worth the teacher's attention. Justin McCarthy, * History of our own times, is better suited to attract the student; it is divided into short topical chapters, and written in an interesting style. A shorter history has been published by McCarthy in the Story of the Nations Series, 2 vols., N. Y., 1899. The last volume of Traill's Social England pays but scant attention to commerce.

Of smaller books that which deserves most cordial commendation to students who desire a description of economic progress in its relation to political changes is Gilbert Slater, ** Making of modern England, London, 1913, revised edition Houghton, Mifflin Co., undated.

The best history of English commerce is that of ** Leone Levi, extending from 1763 to 1878; it is unfortunately, out of print. Cunningham notices some of the important commercial changes in the first half of the century, but devotes most of his last volume to other topics; and the smaller manuals of English economic history pay comparatively little attention to commercial development. * Bowley's small volume is a useful contribution, noteworthy for a number of graphic charts; it is, however, too statistical in treatment to serve the needs of the ordinary reader. Chapman's book, like Bowley's an outgrowth of a successful essay written for a Cobden prize, is confined to a special aspect of the trade with a particular country.

William Smart, * Economic annals of the nineteenth century, London, 1910–17, covering the years 1801–1830, treats commercial policy at length and the history of commerce proper briefly. The same tendency marks Commerce and industry, A historical review, 1815–1914, ed., W. Page, London, 1919, 2 volumes, of which the second, ** Tables of statistics, is a very useful compilation. Other statistical sources, of importance to a student making a careful study of the subject, are Porter, ** Progress of the nation and M'Culloch, ** Commercial dictionary, of which various editions have been published. A revision of Porter by F. W. Hirst, London, 1912, aims to bring his statistics down to date.

CHAPTER XXXVI

ENGLAND: REFORM OF COMMERCIAL POLICY

430. Burden of tariff on trade and manufactures. — After this survey of the development of English trade in the first half of the century we must attend to a most important change in English commercial policy, which lies mainly in this period. We shall consider three groups of topics: the reform of the general tariff; the repeal of the corn laws, protecting agricultural products, especially wheat; and the repeal of the navigation laws, protecting shipping.

England entered the nineteenth century with a cumbrous mass of tariff regulations inherited from the past, from which only the worst excesses had been pruned by statesmen like Walpole and Pitt. Customs laws had accumulated for 500 years to the amount of 1,500 statutes, "often confused, often contradictory, sometimes unintelligible." Hardly any ware which was obtainable abroad, whether it was a raw material or a manufactured product, escaped the duties levied under one or another of these laws. The duties were heavy and were enforced with unreasoning severity; a man who imported a mummy from Egypt was told that it was a non-enumerated manufacture, dutiable at nearly $1,000. Internal taxes reached articles which escaped the customs tariff. The taxes on the publication of books were so heavy that they amounted on an ordinary edition to one seventh of the whole cost, and exceeded the remuneration of the author. The cotton manufacturer had to pay not only an import duty on his raw cotton (higher when it was brought in a foreign ship); he had to pay an excise or internal tax on calico which he printed; and he had to pay taxes, in one form or another, on all the important materials he used in manufacture, — flour, starch, leather, soap, dyestuffs, paper, timber, brick, tiles. A man could not build a factory, or run it, or feed and clothe his workmen, without paying taxes at every step.

431. Prevalence of smuggling. — A partial relief from the burden of the customs was obtained by smuggling. Tariffs could hinder but could not absolutely stop the natural movement of commodities. Smuggling was a regular profession, with a tariff modeled on the regular tariff, but enough lower to invite business; the smuggler's charge varied ordinarily from 15 to 40 per cent ad valorem. Large numbers of the common people were leagued with the smugglers to defy the law, and the upper classes, even the legislators themselves, accepted smuggling as a matter of course. A member of the House of Commons once flourished his silk bandanna handkerchief before the House, saying: "Here is a foreign ware that is totally prohibited. Nearly every one of you has a similar illicit article in his pocket. So much for your prohibition." The government framed its duties with an eye to the ease of evading them; it laid a higher duty on fancy silks than on plain, because the smugglers were at a disadvantage in handling the former, which had to be brought in at once, before the fashions changed, while plain goods could wait the smuggler's convenience.

432. Beginning of the reform movement, 1820. — More and more as time went on, and England's commercial capacity increased, were the evils and abuses of the system appreciated. By 1820 the times were ripe for a change, and the movement to reform was initiated in that year by a petition from a group of London merchants. The petition urged the principle of free trade which the economist Adam Smith had supported in his "Wealth of Nations" (published in 1776), and prayed that all restrictive regulations, not imposed on account of the revenue, including all duties of a protective character, might be repealed at once.

433. Reform of the tariff under Huskisson. — The early stages of tariff reform, effected under the leadership of Huskisson about 1825, included the following: (1) The simplification and condensation into manageable form of the customs laws. (2) Reduction or removal of the duties on raw materials. (3) Reduction of the duties on manufactures, generally to 30 per cent or less, on the principle that such a duty was ample for protection, if a ware could be made at home to advantage. (4) The removal of most of the restrictions on export. These restrictions had affected raw materials, partly manufactured goods, and even artisans themselves. The government had tried to keep skilled workmen at home, but found that it merely made them discontented, forced them to evasions, and kept them from coming back when they had once left the country: it left them henceforth free to emigrate. It was still unwilling to allow machinery to be exported freely, for fear that other countries would build up a competition in manufactures, but it recognized the difficulty of making its restrictions effective, and relaxed them greatly.

434. Results and later completion of the reform. — The results of the reform exceeded anticipations. Not only did those industries benefit which (like cotton, for instance) had previously been taxed for the support of others, but the protected industries themselves gained by the revision of the laws. The export of woolen stuffs increased rapidly after the removal of the prohibition on the export of raw wool. The silk manufacture, which had made slow progress and secured only a small market under the system of high duties and prohibitions, advanced more rapidly now in a decade than it had done before in a century.

The work of reform was, however, still far from complete; the tariff retained many incongruities and was felt still to be oppressive by the business interests of the country. The second stage in the advance to free trade was effected under Sir Robert Peel, who in 1842 secured the reduction of duties on 750 articles, and in 1845 abolished 430 out of a total of

813 import duties. Peel's reforms left still a considerable element of protection in the tariff, and the final acceptance of free trade waited till Gladstone's laws of 1853 and 1860, which lowered and then swept away import duties by the hundred, and left the English tariff substantially in its present shape. The system of "free trade" which England has since maintained does not imply a complete lack of import duties; more than one fifth of the total revenue from taxes is now yielded by the customs. Import duties, however, have been restricted to a very few commodities, and are "revenue," not "protective" duties, in the sense that they do not encourage the production in England of anything which can be produced more cheaply abroad.

435. The corn laws and their effects. — Previous to the great changes which turned England into a manufacturing country, the agricultural interests which controlled Parliament had assured themselves a good measure of protection in framing the tariff laws. The importation of grain was prevented by high duties; and the export was favored by bounties when the supply was relatively plentiful and the price fell below about $1.50 a bushel. Export became more and more rare as the home demand for foodstuffs grew with the increase in the industrial population; and toward the close of the eighteenth century it became ever a more serious question whether England could produce at home sufficient food for her growing people. An attempt was made to arrange the laws so as to keep the price of wheat steady at about 48s. a quarter ($1.50 a bushel), but the laws did not succeed in preventing violent fluctuations in the price. At the close of the great wars, in 1815, English agriculturists demanded a continuance of the protection which the stoppage of commerce had afforded them and the import of foreign wheat was prohibited so long as the price at home did not rise above 80s. (about $2.50 a bushel, or about $.30 for the quartern loaf of bread). Landlords got high rents as a result, but farmers who leased their land suffered when prices fell to a reasonable level, and consumers were forced to pay extortionate prices for a prime necessity. Hundreds of thousands of the working classes were brought to the verge of starvation in 1817 by the price of wheat rising to 112s. (about $3.50 a bushel).

436. Movement of English manufacturers for a repeal of the corn laws. — The House of Commons, even after the electoral reform of 1832, afforded but little representation to the manufacturing and mercantile classes; four fifths of its members belonged to the landed interests, and though they made some slight concessions they refused to grant adequate relief. It was necessary for the opposition, which organized under the name of the Anti-Corn-Law League, to carry on its campaign outside of Parliament; it could report, at the annual meeting of 1843, that nine million tracts had been distributed, and meetings had been held in 140 towns. Inside of Parliament the movement engaged the energies of orators like Cobden and Bright, who saw in it a question of life and death for English manufactures. How was the manufacturer to pay the wages which such a costly food supply required? To whom was he to sell his goods when so large a proportion of English incomes had to be expended for bare necessaries, and when England refused to take from foreign countries the commodities which they offered in exchange? Even among the agricultural classes the landlords were the sole gainers. The agricultural laborers were wretchedly poor; Cobden asserted that none of them spent more than about $7.50 a year in manufactured articles, if shoes were excepted, and that they bought a smaller amount of English manufactures than the people of Brazil.

437. Repeal of the corn laws and its significance. — With the passage of time and with the growth of the industrial population conditions changed from bad to worse. The combination of a bad harvest and bad times in business in 1841 forced thousands of the manufacturing population to seek poor relief, while other thousands were estimated to be earning on the average less than a shilling a week. It needed only a shock like that given by the crop failure in the first year of the Irish famine, 1845, to force the change which had come gradually to be recognized as inevitable. Peel's act of 1846 left a slight protection for a few years; but after 1849 only a nominal duty was to remain, and even this was abolished later.

The repeal of the corn laws was a momentous act in English history. It marks the formal and final recognition that England had grown from an agricultural to an industrial and commercial state. It threw England, as an English economist said, from corn to coal as the staple product of the country. Manufactures and trade thenceforth developed freely. Even the agricultural interest gained in ways which it had not foreseen: the consuming population increased rapidly both in numbers and in purchasing power, and demanded increasing quantities of meat, dairy produce, vegetables, and fruit. The full effect of the change on commerce will be apparent when we review the history of the last half of the century.

438. Reform of the navigation acts. — This survey of the course of English policy in the first half of the nineteenth century will be closed by the consideration of a third topic, the laws protecting shipping. Reference to a previous chapter will show how severe were the restrictions meant to prevent the competition of foreign shipping, in the seventeenth and eighteenth centuries. The period now under consideration was marked by the removal of all these restrictions, and by a great growth, notwithstanding, in the English merchant marine.

The establishment of the independence of the United States, and later of the Spanish American republics, overthrew the colonial theory on which many of the navigation acts were based, and forced numerous revisions. The long wars of the Napoleonic period, also, led England to grant privileges to neutral powers in the carrying trade. Important breaches, therefore, had been made in the old system before the century was far advanced, and it was in no condition to withstand the assaults directed against it by people both abroad and at home whose interests it injured. The United States adopted a policy of reprisal which forced England to admit American ships freely to English ports, and threats of similar action by European countries led in 1824 and the years immediately following to a series of treaties putting foreign ships on an equality with English.

439. Final repeal of the navigation acts. — The navigation acts had grown into a most complicated system, and it is impossible to describe in detail their gradual relaxation. By 1830 English ships had lost all their privileges except in the coasting trade, and in the trade with and between the colonies. Even this amount of protection came to be regarded as a burden not only on commerce but on shipping itself, and was abolished in 1849 and 1854. Every step in the reform of the navigation acts was bitterly fought by adherents of the old system, who prophesied ruin to English shipping if it were denied protection and left to make its own way. How groundless were the fears of those who opposed reform can be seen in the following table, giving in millions the tonnage of English ships in the period 1800–1850: 1800, 1.6; 1810, 2.2; 1820, 2.4; 1830, 2.2; 1840, 2.5; 1850, 3.5.

QUESTIONS AND TOPICS

1. Are all taxes of equal amount equally burdensome? Would a country fare as well if it raised its revenue by taxing saws and chisels instead of cigarettes and playing cards?

2. What are the effects of smuggling on (*a*) the public revenue, (*b*) honest merchants, (*c*) consumers?

3. How do the rates of the English tariff, as established at this time, compare with the rates of the present tariff of the United States?

4. On what articles are import duties still levied in Great Britain? [See Statesman's Year-Book, index, Great Britain, customs.]

5. The corn laws and their effects. [Morley, Cobden, chap. 7; Rand. Ec. hist., chap. 9.]

6. English agriculture under the corn laws. [Traill, Soc. England, 6: 75–84, 211–217.]

7. The agitation for repeal of the corn laws. [McCarthy, vol. 1, chap. 14; Morley, Cobden, chap. 6.]

8. The repeal of the corn laws. [McCarthy, vol. 1, chap. 15.]

9. English agriculture after the repeal. [Traill, Soc. England, 6: 404–421, 599–607.]

10. What were the main features of the navigation acts? [See above, sect. 358, or study the main provisions in Rand, Ec. hist., appendix 1.]

11. Conditions at the time when the Acts were repealed. [Lindsay, vol. 3, chap. 6.]

12. Development of the merchant marine. [Traill, Soc. England, 6: 392–404; Ward, Reign, 2: 111–118.]

BIBLIOGRAPHY

The best single source on the topics of this chapter is Bernard Holland, ** The fall of protection, 1840–1850, London, 1913. Of more comprehensive and more elementary books may be mentioned Mongredien, * History of the free-trade movement, and Armitage-Smith, ** Free-trade movement, which is well suited to topical assignent. Similar in scope is W. Cunningham, ** Free-trade movement, with concluding chapters on recently projected changes.

The best account of the corn laws is to be found in Morley's ** Life of Cobden, and George Macaulay Trevelyan's ** Life of John Bright, London, 1913. Graphic pictures of conditions of life under the corn laws are provided by The hungry forties: life under the bread tax, London, 1904; and J. K. Snowden's Corn law memories, in Contemp. Review, 1905, 88: 64–71. J. S. Nicholson, * History of the English corn laws, London, 1904, is a thoughtful study in brief compass, but is not suited to topical reading.

The navigation acts are treated by Holland, and at considerable length in the third volume of Lindsay. The best recent contributions on the subject are in periodical literature: John Rae, ** English shipping under protection, in Contemporary Review, 1905, 87: 666–675; J. H. Clapham, ** The last years of the navigation acts, English Hist. Rev., 1910, 25: 480–501, 687–707.

CHAPTER XXXVII

ENGLAND: COMMERCIAL DEVELOPMENT, 1850-1914

440. Development of English commerce since 1850. — An accompanying table sets forth the course of English trade down to the outbreak of the World War. The figures refer, as in the previous table, to imports for consumption in the country, and to exports of British and Irish produce. To indicate, however, the share of commerce which the English enjoyed merely as middlemen I add a column of re-exports, foreign and colonial wares imported but shipped away again. If the amount of these wares be doubled (since they figure both as imports and exports), and added to the other items, the sum gives the gross foreign trade (excluding that in precious metals). The system of valuation of imports changed in 1854; under the old system of "official" values the imports of that year would have been entered at twenty-eight million pounds less than under the new system of giving the "real" values. This table, therefore, is not directly comparable with the table of the preceding chapter; and to remind the student of this I have left a few years vacant, making a gap between the two tables.

441. Importance of England and of British Empire in trade of the world. — A mere glance at this table will be sufficient to show the progress that has been made since 1850. Some idea of the importance of this trade, not only to England but to the world at large, can be gathered from the fact that it amounted, about the middle of the period, to nearly one-fourth (23 per cent) of the estimated total foreign trade of the world, and at the close of the period, (1912), in spite of the commercial progress of other countries, it was still one-sixth. If we ex-

Annual Average Trade of the United Kingdom, in Millions, Sterling, with Rough Equivalents in Millions of Dollars

	Imports		Exports		Re-exports
1855–59	£146	$730	£116	$580	£23
1860–64	193	965	138	690	42
1865–69	237	1185	181	905	49
1870–74	291	1455	235	1175	55
1875–79	320	1600	202	1010	55
1880–84	344	1720	234	1170	64
1885–89	318	1590	226	1130	61
1890–94	357	1785	234	1170	62
1895–99	393	1965	238	1190	60
1900–04	466	2330	289	1445	67
1905–09	522	2610	377	1885	85
1910–13	611	3055	474	2370	107

tend our view to embrace not only the little islands in the North Sea, but all the countries depending on them and forming the British Empire, we find the trade of this group over one-fourth of the trade of the world.

A survey which omits from consideration trade across land-frontiers, and considers only sea-borne trade, is even more impressive. Of the total sea-borne trade of the world in 1912 it is estimated that 15% (in value) was between countries within the British Empire, and 39% was between the Empire and foreign countries. Thus the trade of which one or both terminals lay within the Empire was over *half* of the maritime trade of the world. The trade of which one terminal was in the United Kingdom amounted by itself to about 40% of the world's total sea-borne trade.

44.1 **442. Chief causes of the rapid development of English commerce.** — The causes of this development may be summarized briefly as follows: (1) The English people were the most advanced, in industrial and mercantile ability, of any people in the world. They had the start on others in manufactures and trade, and reaped the benefits of their early training in this period. (2) The geographical situation of England, and the physical resources of the country, especially its coal, made the English superior to most peoples and equal to any, in this age of transportation and manufacture by steam. (3) The commercial policy of the government allowed the people to make the most of their advantages. Toward the close of the eighteenth century an English statesman had told Benjamin Franklin of his idea "to make England a free port, for which he said the English were especially fitted by nature, capital, love of enterprise, maritime connections, and position between the old and new world, and the north and south of Europe, and that those who were best circumstanced for trade could not but be gainers by having trade open." This idea waited long for its realization, but on that account led to the more rapid progress when it was carried into effect. Within five years of the repeal of the corn laws exports rose fifty to one hundred million pounds sterling per annum; manufactures and trade developed by leaps and bounds. Free trade alone cannot be credited with all the progress that England made in this period. It was, perhaps, the least of the three factors enumerated, but still it was of such importance that the other two factors would have been of much less effect without it.

443. Character of English exports. — This trade had now in a more pronounced form, the characteristics which it had been gradually assuming and which make it one of the most remarkable examples of advanced commerce in the world. Considering first the exports, we find that over three-fourths of them (in value) have consisted of wares wholly or mainly manufactured. Only one raw material has gone out in great quantity; this is coal, which has contributed about one-tenth of the total value of exports. Aside from coal few wares, and those of relatively slight importance, have left the islands in their crude form.

444. Leading items among the exports. — Cotton manufactures kept their place at the head of the list of exports, comprising about one quarter of the total. England in 1913 exported the enormous sum of over seven thousand million yards of cotton cloth a year. The exports of iron and steel and their products rose in this period to the second place; England was now purveying to other nations the means of raising the structure on which modern manufactures and transportation are based. The growth in the exports of machinery is especially striking; this item increased over fivefold within the fifty years to 1900, and doubled again in the short period before the outbreak of the war. Below these leading items come others with which we are already familiar (woolen and linen manufactures) and some which had gained promotion on the list of exports; leather goods, chemicals, jute manufactures, pottery, etc.

445. Imports; prominence of foodstuffs. — The fact suggested by the list of exports, that England has specialized more and more in manufactures, is borne out by the list of imports during the past half century. Since the adoption of the free-trade policy the English people has been freed from dependence on the home supply of food and has supplied its necessities by purchases abroad. Among the imports, therefore, we find that the largest item is that of foodstuffs, which has grown rapidly both in its absolute value and in its proportion of the total imports. In contrast with the medieval period, when only luxuries like wines and spices could pay for their transportation, we find now the great food staples flowing to England from countries thousands of miles distant. Improvements in transportation, due especially to the use of steam, have enabled bulky cargoes to pay for their passage, and the weight of the imports in tons has increased much more rapidly than their value. Improved means of transportation and preservation have moreover enabled the English to import perishable articles like meat, fruits, and vegetables, and dairy products; and the imports of these wares have increased from ten to twentyfold in weight.

446. Imports of raw materials and manufactures. — The same conditions have affected the imports of raw materials.

A century ago the manufacture of iron from imported ore would have been thought an absurdity, but it has become a regular practice now that freights are so low; and the import of minerals is a respectable item in a list in which the raw materials for the textile industry are still, of course, most important. Free trade encouraged also a great increase in the imports of manufactures, which grew nearly tenfold in the fifty years to 1900, though they still were less important than foodstuffs and raw materials. The largest item among them after the crude metals, was silk, for the manufacture of which other nations have always shown more aptitude; but the list included woolens, hardware, leather (boots and shoes), paper, and many other items.

447. Explanation of the excess of imports over exports. — A feature of England's foreign trade deserving comment and explanation is the great excess of imports over exports. It is natural to expect that these two items, which seem to represent the two sides of a balance sheet, should be nearly equal to each other; but in fact the value of exports has for many years been far below that of imports, and the difference in the years toward 1900 amounted to the enormous total of $700,000,000 to $900,000,000 a year.

England did not receive this surplus of goods as a gift, but earned it by services in the past and in the present which put other countries under obligations to her. The English had invested enormous sums abroad, and had the right therefore to interest and dividends; their merchant marine did a large part of the carrying trade of the world, and naturally had a large bill for freight to render to other people; London was the financial center of the world, and made the foreigner pay tribute for the services and commissions executed for him. There were some items on the other side of the account, but on the whole England had the right every year to take from other countries in the form of goods vastly more than she exported to them.

448. Detailed items in England's international balance. — The items which go to make up the credits and debits of England in relation to other countries may be set forth in the form of a balance sheet, as in the table below, which gives the estimate of these items for the year 1910. Figures are given in round millions of pounds sterling.

Credits		*Debits*	
Exports of merchandise	430	Imports of merchandise	678
Re-exports (foreign mdse.)	103 ✓	Imports of bullion	71
Exports of bullion	64 ✓		
Income from investments	178 ✓	Capital invested abroad	170
Earnings of shipping	100 ✓		
Banking and business earnings	55	Earnings due foreigners	15
	931		934

The students should note several characteristic features of this balance sheet. (1) Only the items at the head of the columns are measured accurately: the others are "invisible" items, represented only by pieces of paper passing through the mail, but these are, pound for pound, of equal importance. (2) The inflow and outflow of bullion are large items, but nearly balance; England has acted as a clearing house for the payments of the world's debts, and the distribution of the world's gold. (3) In this period England re-invested in other countries most of the great sum due in interest and dividends. The English investor may be pictured as receiving a dividend check from the United States or South America, and as mailing it back instead of cashing it, asking that it be added to the capital sum of his investment.

449. Growth of the merchant marine. — England was the leader among nations in the carrying trade in 1850, and retained her position still unchallenged at the close of the century. At the outbreak of the war in 1914 nearly half of the world's steam tonnage was under the British flag; the tonnage of Germany, which came second on the list of countries, was not one-fourth of the British. The number of ships in the English merchant marine has actually decreased in this period of progress, but the carrying capacity has grown immensely by the increase in size of the ships and by the substitution of steam for sailing vessels. It will be remembered that the protection afforded by the navigation acts was removed before the beginning of this period. The government has made generous payments for the carriage of mails, but still has refused to pay regular subsidies or bounties for the encouragement of shipping. English shipping, nevertheless, has held its own. Of the steam shipping built in the twenty years preceding the war, two-thirds were built in the United Kingdom, and over one-half was built to sail under the British flag. While soon after 1850 the English merchant marine carried not much more than half of the foreign commerce of the country, the proportion grew in later years to two-thirds and nearly three-quarters. This proportion declined somewhat in more recent years, under the competition of Continental steamers, but it is estimated that in 1913 British shipping carried over one-half of the total sea-borne trade of the world, including nine-tenths of the trade inside the Empire, nearly two-thirds of the trade between the Empire and foreign countries, and nearly one-third (30%) of the trade between foreign countries.

450. Relative rank of English ports. — The great commerce of the United Kingdom was very unequally distributed among its parts, nine-tenths of it going to England and Wales and most of the remainder to the lowlands of Scotland. London still kept its place as the chief port not only in the United Kingdom but in the world, mainly by reason of its import trade; it was exceeded in the amount of exports by the second port, Liverpool, which distanced all rivals in the important trade with the United States. An immense gap separated these two leading ports from the others, Hull, Manchester, Glasgow, Southampton, etc. Ports whose names were famous in the Middle Ages and even in later times have dropped into obscurity, with fortunate exceptions like Harwich and Grimsby, which have recovered their positions in recent times. Their places were taken by ports from which cotton and coal products are shipped: Manchester, once an inland village but now united with the sea by a ship canal and standing (1913) fourth on the list, the Tyne ports, Cardiff, etc.

The importance of ports was measured in the preceding paragraph by the value of the cargoes imported and exported through them. While this appears to be the best standard by which to determine commercial ranking it is proper also to consider not the value of cargoes, but the volume of shipping entering and clearing from a given port. Measured by the tonnage of vessels London was but little superior to Liverpool before the World War, was inferior to New York and to Hamburg, and about even with Rotterdam and Antwerp.

451. Relative share of different countries in England's commerce. — Taking up now the direction of England's trade abroad and the changes in its course during the last half of the century, we find ourselves approaching questions which have roused acute political controversy. Reserving for future consideration changes which have shown themselves in the most recent period we may note conditions as they were about 1900. England still found the trade with her European neighbors the most important part of her commerce, making up about two-fifths of the whole; this trade had increased by over one-half during the last forty years of the century. Next in importance to it was the trade with the British dependencies, a little less than one-quarter of the whole, which had increased somewhat more slowly. In the third place we may put, not a continent or group of countries, but one country, the United States, between which and England the trade was greater than between any other two countries on earth. England bought from the United States in 1901 more than twice as much as she bought from the next largest seller (France); and she sold the United States in that year more than she sold to all the countries embraced in her great Empire. This part of English trade, moreover, had grown more rapidly than any other, increasing by once and a half in the period. Grouping together all countries beside those enumerated, we find that the trade with them had remained nearly stationary, and amounted only to about one-eighth of the total.

QUESTIONS AND TOPICS

1. Treat the statistics, sect. 440, by graphic representation, in the manner that has already been suggested.

2. Compare the resons given for the increase of British commerce with reasons that may suggest themselves to you for the growth of the commerce of the United States. [See sect. 320 for a reference to Gladstone's views.]

3. The following list gives, in million pounds, the value of the chief exports of home produce in 1900: cotton manufactures 62.0, do. yarn 7.7, woolen manufactures 15.6, do. yarn 6.1, linens and yarn 7.1, jute and yarn 2.4, apparel and haberdashery 6.8, ships 8.6, iron and steel 32.0, hardware and cutlery 2.1, copper 2.9, machinery 19.6, coal, etc., 38.6, chemicals 9.2. Total exports of home produce 291.4, exports of foreign and colonial produce 63.0, grand total 354.5. Treat the figures as suggested under sect. 419. [The figures are from the preliminary report for 1900, Statesman's Year-Book, 1901, pp. 85, 87; details of iron and steel exports will be found p. 88.]

4. Development of the iron industry. [Jeans, The iron trade of Great Britain, London, 1906, or in Ashley, Brit. Industries, 2–37; Bell in Ward Reign, 2: 196–237; Lady Bell, At the works, London, 1907.]

5. Development of the textile industry. [Soc. England, 6: 589-599.]

6. The cotton industry. [Slagg in Ward, Reign, 2:153–195; Helm in Ashley, 68–92; S. J. Chapman, The cotton industry and trade, London, 1905.]

7. The woolen and worsted industries. [Hooper in Ashley, 93–119; Graham in Lectures, chap, 10; J. H. Clapham, The woollen and worsted industries, London, 1907.]

8. Linen and flax. [Patterson in Ashley, 120–150.]

9. Pottery. [Soc. England, 6: 379–392.]

10. England as a wheat market. [Edgar, Story, chap. 5.]

11. The food supply of London. [Quarterly Review, Oct., 1899, 190: 467–486; Jan., 1900, 191: 117–137.]

12. England's food supply in time of war; need of the navy. [H. Seton-Karr in North Amer. Rev., 1897, 164: 651-663; W. E. Bear in National Rev., 1896, 27: 133-144; Quarterly Review, 1905, 203–572–598.]

13. Project of national granaries for storing a supply of food. [R. B. Marston in Nineteenth Century, 1898, 43: 879–889; Yerburgh in Nat. Rev., 1896; 27: 197-207.]

14. British capital abroad and the balance of trade. [Mulhall in No. Amer. Rev., 1899, 168: 499–505; Crammond in Quarterly Rev., 1911; 215: 43–67; C. K. Hobson, The export of capital, London, 1914.]

15. Development of the merchant marine. [Ginsburg in Ashley, 173–195; Taylor in Forum, 1900–01, 30: 463–477.]

16. British shipping subsidies. [Root in Atlantic, 1900, 85: 387–394.]

17. Growth of British ports. [Ackland in Nineteenth Century, 1897, 42: 411 ff.; Browne in Contemp. Rev., Feb. 1918, 113: 190–199.]

18. The port of London and improvements. [Owen in Lectures, chap. 4; Quarterly Rev., 1903, 197: 252–269; Marchant in National Rev., 1902–3, 40: 715–737, with map; Miller in Fortnightly Rev., 1902, 78: 796–805.]

19. The supply of British seamen. [Cowie in Contemp. Rev., 1898, 73: 855–865; Tomlinson in English Rev., 1911, 9: 114–121; Longford in Nineteenth Cent., 1912, 72: 1114–1130.]

BIBLIOGRAPHY

The course of English commerce has attracted interest in increasing measure, and publications upon it multiply, as we approach the end of the century. Only a few books can be noticed here; the reader is referred to the topics for references to other books and periodical articles.

Ward, * Reign of Queen Victoria, contains good chapters on the industrial development of the reign. Stephen Bourne, * Trade, population, and food, London, 1880, is a careful analysis of the decade 1870–80, and furnishes a good starting-point from which to survey the course of recent trade. J. W. Root, Trade relations of the British Empire, Liverpool, 1903, provides a survey of English commerce at the close of the period, with special reference to the pending question of tariff changes. Similar books have been written by Edward Pulsford and L. G. Chiozza Money. A useful statistical survey is provided by John H. Schooling, * The British trade book, fourth issue, London, 1911. Lectures on British commerce, with preface by W. P. Reeves, is mainly a description of the present organization. A. J. Sargent, * Seaways of the Empire, London, 1918, is a good survey of the geography of British trade; and Adam W. Kirkaldy, ** British shipping, London, 1914, includes both history and recent organization. ** British industries, edited by W. J. Ashley, is, however, the book deserving of the warmest recommendation; nowhere else will the reader find such good descriptions of the leading industries of Great Britain. Each industry is described by a specialist of recognized authority, and though the book does not go far into history it gives indispensable information on the recent results of historical development. More popular and less valuable is Great industries of Great Britain, London, Cassell, no date (about 1880?), 3 vols.

CHAPTER XXXVIII

ENGLAND: PRE-WAR PROBLEMS

452. Relative decline in value and quality of English exports. — The questions agitating the minds of English business men and statesmen at the opening of the twentieth century rose from a consideration of the immediate past and of the future of English commerce. While the country had enjoyed a full measure of prosperity in recent years, and had witnessed a considerable increase in the quantity of its foreign trade, the quality of this trade awakened forebodings. The increase had been almost entirely confined to imports. Since 1872 the exports, though they had increased in bulk, had remained almost stationary in value; they had kept pace neither with the growth of population in England, nor with the growth in value of the exports of other countries. In the twenty years, 1881–1900, foreign countries enlarged their purchases (imports) by 11 per cent, while England augmented her sales to them (exports) by only 4 per cent; the British possessions enlarged their purchases by 17 per cent, while English sales to these dependencies showed an actual decrease of 1 per cent. The exports of which England has been most proud, as indicating her superior industrial strength — the textiles, and iron and steel — had either increased slowly or shown an actual decline. On the other hand, the exports which had increased in value were of a kind which the English viewed with disfavor. Many of them (apparel and slops, preserves, soap, furniture, etc.) were the product of cheap and unskilled workers and seemed to show a degradation of English labor. Others of them, potter's clay and especially coal, were raw materials which the English would have preferred to use in their own industry at home.

453. Growth in exports but decline in relative share of trade. — The table of trade of the United Kingdom in the preceding chapter shows that the period of stagnation in the English export trade ended about 1900, and that there was a marked recovery between that date and 1914, even after allowance is made, as it should be, for the rise in the general level of prices, which magnifies the actual growth. Studying the course of trade during the generation comprised between the dates 1880–1909, the United Kingdom maintained or increased the value of its sales in all but two of the more important markets of the world; and the two countries to which British exports have declined, Russia and Roumania, would not by themselves form very serious exceptions. If, however, we select for study not the bare figures of export values, but the figures showing the percentage which British sales to any country form of that country's total imports, the result is very different; for we are then measuring British progress not by the home standard but by the standard set by commercial competitors.

454. Illustration by the recent commerce of Japan. — The distinction is so important that it deserves illustration by a particular example, and we may choose for the purpose a country which during the recent period has furnished a rapidly growing market to the merchants of the world, namely, Japan.

ANNUAL AVERAGE IMPORTS OF JAPAN IN RECENT DECADES
(Values in millions of yen)

	From United Kingdom	From Germany	From U.S.	From other countries	From all countries
1881–1890	19.6	3.4	4.2	19.3	46.5
1891–1900	46.6	14.8	22.8	87.0	171.2
1900–1909	84.3	36.1	65.8	199.8	386.0

The Japanese monetary unit, the *yen*, has declined considerably in value in the course of the period, and therefore no exact equivalent for it can be given; but even allowing for this

PERCENTAGE OF JAPAN'S IMPORTS FROM EACH COUNTRY

	From United Kingdom	From Germany	From U.S.	From other countries	From all countries
1881–1890	42.2	7.2	8.9	41.7	100
1891–1900	27.3	8.6	13.3	50.8	100
1900–1909	21.8	9.3	17.0	51.9	100

decline the growth of British export trade to Japan appears satisfactory if the student regards merely the figures in the first column. If we apply, however, the comparative standard, and measure the British exports to Japan alongside those from other countries, the result is not the same.

455. Relative decline of the United Kingdom in the world's markets. — Pursuing the comparative method, illustrated by the last preceding table, we find that the United Kingdom during the generation 1880–1909 showed an increased share of sales in only three of the minor markets of the world: Spain, Argentine Republic, Sweden. It almost held its own in France, Switzerland and Norway; but in most of the important markets of the world it lost ground seriously.

Even in its trade with the British dependencies the United Kingdom did not hold its own. Comparing the percentage of British exports to a dependency with its total imports, we find that the United Kingdom kept its place in only one of its colonial markets, Mauritius, a purchaser of relative insignificance, while foreign countries gained ground from it in British India, Australia, Canada and all the other important colonial markets.

456. Significance of the decline, and three possible explanations of it. — The relative decline in English exports did not imply that the country was approaching industrial bankruptcy, but it did mean, if long continued, the loss of industrial leadership; and the causes of this decline and remedies proposed to meet it are worthy of careful attention. The decline in exports may be attributed to one of three factors: (1) weakness in manufacturing the wares which form the staple of the export trade; (2) weakness in marketing these wares, when they have been made; (3) the adverse influence of protective tariffs in other countries.

457. (I) Competition in manufactures by low-grade labor. — Considering the first of these factors, we find English manufactures menaced by competition from two different directions: from the East (countries like India and Japan), and from the West (countries like Germany and the United States). Eastern competition threatened especially England's staple manufacture, cotton. The English laborer was superior in every point to his Asiatic competitor, but not enough better to earn his higher wages when employed in the manufacture of coarse goods. England had built up a serious and growing competition by exporting machinery and sending out skilled managers and foremen to superintend it. During the past generation there had been an immense development in the textile manufactures of India and Japan, and these countries were able now not only to supply a large proportion of their own demand, but also to reach out into neutral markets like China.

458. Competition in manufactures of high-grade labor. — More serious, because capable of far greater extension, was the competition which the Englishman had begun to experience from advanced western peoples. This confined itself to no one branch of production, but spread over the whole broad field of manufactures. Americans and Germans had begun to supply not only the British dependencies but England herself with manufactured wares, in increasing measure. Some of the reasons suggested to explain their superiority were as follows: (1) Elementary education had been developed only recently in England, and had been hampered by sectarian questions; the average laborer in Germany and the United States was better equipped for modern methods of manufacture than was the Englishman. (2) It was asserted that trade unions had seriously detracted from the productiveness of English manufactures, by preventing the introduction of improved machinery and by limiting output. (3) Technical education was even more backward than general education; improved processes were introduced earlier and developed further in other countries, for lack of a class of trained manufacturers in England. (4) Finally, and probably the most important point of all, English manufactures appeared to suffer from the very fact that they had been long established. An industry was divided among many independent firms, each clinging resolutely to the plant, the processes and the methods which had won for it success in the past. Foreign countries learned all that the English had to teach, and applied the lessons in a new field in which they could build up great manufacturing units,with fresh machinery adapted to production on a large scale, and with a more flexible and more efficient organization. It was charged that the directing class in England had lost its original energy, and did not realize its serious responsibilities. An English expert who investigated the American cotton industry reported that there was a great difference in the energy, intelligence, and adventurousness of the managing class in the two countries, all to the advantage of the United States.

459. (2) Alleged weakness of the English mercantile organization. — In the preceding paragraph we have suggested various elements of weakness in English manufactures, which in greater or less degree were bound to affect the power lying behind the English export trade. We have now to consider another set of conditions, which are easily confused with the foregoing, but which are better kept separate. English manufacturers might be strong, and still they would have but a small export trade if they were not informed as to the wants of their customers, and did not study their customers' tastes in supplying goods. This set of conditions, which may be termed mercantile, the business of the merchant rather than of the manufacturer, we may study under two heads: (*a*) finding out what is wanted; (*b*) selling a suitable ware when it has been made.

460. Insufficient knowledge of the needs of foreigners. — (*a*) The complaint was general that the scouts of British commerce, the commercial travelers, were too few in number and that they were ill prepared, especially in their knowledge of foreign languages. The English exporter shipped goods which he thought were suitable, without knowledge or regard of the desires of his customers. A business man who had had seven years' experience with trade in the Empire said, "There is a universal complaint: 'You English will not make your goods to suit our markets. You send your samples and tell us to take them or leave them — you don't care which. If we ask you to alter things you either refuse to do it or else you demand prohibitive prices.'" In countries where English is not spoken (Persia, Sumatra, South America, etc.) the conditions were still worse. The Merchandise Marks Act, the origin of the familiar "Made in Germany," was designed to protect the British colonist from having foreign-made goods palmed off on him as English, and thus help the English manufacturer; but it served only to advertise foreign manufactures, and led the colonists to import goods directly from foreign countries, instead of taking them through English hands.

461. Unwillingness to adopt foreign trade customs. — (*b*) Finally, when wares suited to sale in any market have been manufactured, they need to be sold, to maintain trade. English exporters were criticised for allowing their wares to be driven out of foreign markets by other wares, no better in themselves but for some reason more attractive to the customer. Here again the commercial traveler was at fault, but part of the blame lay on the exporter. Sales must be made in small lots and on long credit in some countries, if they are to be made at all; and the English had shown a disinclination to adapt themselves to such conditions which had enabled others (especially Germans) to take trade from them. When other things are nearly equal slight differences in packing and shipping may turn the scale. The English lost trade in Australia because they sent tacks in paper packages instead of in cardboard boxes, because they sent cartridges in lots of one hundred instead of lots of twenty-five. An interesting example of an opportunity well met occurs in the career of an Englishman who left the field of manufacture to become a leading statesman — Joseph Chamberlain. He found that the trade with France in his product, wood-screws, was small; he introduced the metric system of measurement, put up the screws in packages of the size usual in France and wrapped in blue paper familiar to the French customer, and developed a large export trade. If there had been more men like Chamberlain in manufactures in England there would have been less need of the protective policy which he advocated as a remedy for the troubles of English business.

462. Tendency to remedy these faults. — There is no doubt that there was a good basis for these charges against the British manufacturer and merchant, though some of them doubtless were exaggerated, and it is impossible to apportion exactly the weight that should be allowed to any one of them. The crisis of the World War was needed to sweep away the customs and traditions of a long past. The stimulus of a struggle for national existence, with the insistent demand for the highest attainable efficiency, effected reforms reaching deeper and further than those of a whole previous generation. Even before 1914, however, many men in responsible positions in English politics and business recognized the need of mending the pace if England was to keep abreast of competitors in industry and commerce. Interest in elementary and technical education quickened; inquiry was directed to the means by which foreign rivals were getting ahead; the government, associations and individuals worked together or independently to further efficiency.

A parliamentary committee which in the course of the World War made a careful study of the prospects of British industry and trade reached the following conclusions as regards conditions in the previous decade. England had taken but a small part in the development of some modern industries, particularly the chemical and electrical; the country had made comparatively little progress in the iron and steel industry, in which it was entirely overshadowed by Germany and the United States; but it had shown wholesome vigor and capacity for growth in some great manufactures, such as the textiles, ship-building and some branches of machine-making. British trade abroad was found to suffer from the competition of foreigners who were found, in some cases at least, to be following methods of organization and marketing that were distinctly more efficient than those which the British pursued.

463. (3) Adverse influence of foreign tariffs; proposals to revise the English policy of free trade. — Under conditions of adversity there is always an inclination to lay the blame, rightly or wrongly, on others. A considerable party in England asserted that the reasons for the recent decline were political rather than economic, resulting from the protective tariffs of other states; and this party asserted that a change in the tariff policy of England and of the colonies was needed to rescue British commerce.

There can be no question of the main fact, that protective tariffs had increased considerably during the last quarter of the century. It is estimated that the principal English exports were burdened with duties equivalent to 10 to 30 per cent ad valorem in most states, but amounting to far more than that in some cases (72 per cent in United States, 130 per cent in Russia). There can be no question that England suffered from these restrictions; every commercial state suffers from them. It is, however, open to grave doubt whether England could help herself by a change in policy; and the question of what change, if any, ought to be made, remained unsettled.

464. Demand for customs duties as a means of defense and retaliation. — One group of "tariff reformers" clung to the ideal of free trade, and favored its maintenance as the policy of the country in general. It would, however, permit deviations from it in particular cases. The adherents of this view asserted that England stripped herself of the armor and the weapons of commercial war when she adopted complete free trade. She could make no effective protest when other nations raised tariffs against her, marked perhaps by offensive discriminations; she must suffer everything because she was forbidden to retaliate. The adherents of this view laid particular stress on the practice of "dumping," as it is called. The manufacturers of protected nations, themselves, secure from England's competition, market their surplus output in England at prices which may not cover the costs, much less the profits, of production. It is cheaper to do this than to break prices in the protected market at home; it kills the English industries and enables foreign manufacturers in the long run to raise prices to a profitable level in the English market. For retaliation against protective countries, and for defense against "dumping," this school demanded that the English government be armed with the power to impose heavy duties, to be temporary in character and to be removed as soon as their immediate object has been accomplished. Such a policy has been adopted in Canada.

465. Proposal of an imperial customs union. — Another school of tariff reformers, led by Joseph Chamberlain, accepted in general the views just indicated, but laid particular stress on another possibility in shaping English commercial policy. It would make the whole great group of English dependencies not only a political unit but a commercial unit as well, bound together in an imperial customs union (*Zollverein*), so that trade would flow from place to place within the Empire instead of crossing its frontier. It is not possible here to discuss the various aspects of this proposal, of which some of the most important are political rather than commercial in character. The attractiveness of the plan is at once apparent; it promises to assure to England a market for her manufactures in the colonies, and to the colonies a protected market for their raw materials in England. The practical weakness of the plan is, however, equally apparent; no law would be necessary to secure this result if the various parts of the Empire found it advantageous to trade with each other, and the mere suggestion that a law is necessary shows that trade would be cramped and the interests of individuals hurt by such an arrangement.

466. Obstacles to a customs union. — The course of trade has, in fact, taken lines more and more opposed to the scheme of a customs union. During the first part of the century, when England was still protectionist, and when the mother country made the laws for its dependencies, the plan could be carried out with comparatively little friction; the colonies were engaged chiefly in the production of raw materials, and were glad to exchange these for English manufactures. Since about 1850, however, both the political and the economic organization of the Empire have changed. The self-governing colonies have received the right to make their own laws, and have used it to raise protective tariffs, against England as well as against other countries. Behind the barriers of the tariff they have developed a considerable manufacturing industry. They were now unwilling, therefore, to open wide their markets to English manufacturers; and showed an increasing tendency to buy what manufactures they did import from other countries than England. They were unable, on the other hand, to supply in full the English demand for raw materials; and any measure designed to restrict supplies of raw materials to some source inside the British Empire threatened injury to producer and consumer at home. The self-governing colonies gave evidence of the strength of their political affection by enacting differential tariffs favoring the British producer. Canada began the practice in 1894, and later enlarged the concession until it amounted to a remission of one-third of the regular customs duty. New Zealand, South Africa and Australia adopted after 1900 the same principle, making their concessions less extensive. The differential advantage thus offered the English exporter must evidently have had an effect on the course of trade. The new policy was keenly resented in Germany, where it was pictured as an abuse by England of her political ascendancy to deprive other countries of the benefit that should go to superior economic efficiency. On the other hand the policy seems to have been less important than ordinary economic factors in determining the flow of goods, and certainly had no decisive influence in changing the customary channels of trade.

467. Relative progress of England and other countries just before the World War. — Just before the outbreak of the World War England appeared to have made a new start in the efforts to keep her place among commercial countries. It is interesting to compare the advance that she had made with the progress of Germany and of the United States.

ABSOLUTE INCREASE IN TRADE OF THE ANNUAL AVERAGE 1910–13 OVER AVERAGE 1895–99.

(Figures in millions of £ sterling, with rough equivalent in $)

	United Kingdom		Germany		United States	
Net imports for consumption.	£218	$1090	£260	$1300	£188	$940
Imports of manufactures.	72	360	48	240	81	405
Exports of domestic products.	230	1150	244	1220	221	1105
Exports of manufactures.	177	885	170	850	140	700

The figures, it should be noted, give not the total commerce of any country, but the gain which each country had made in the period in question. The figures do not take account of the difference in population in the three countries; they treat the three different countries as units. The reader in studying them cannot fail to be impressed by the closeness in the struggle for commercial leadership, and will be better prepared to understand how precarious was the situation if in one of the countries the view was dominant that commercial interests were group interests, to be furthered by any assistance which the state could render, if necessary by the sword.

QUESTIONS AND TOPICS

1. Note the different senses in which the commerce of a country may be described as "declining." (1) Other things remaining the same, there may be an absolute decrease in the quantity and value of both exports and imports. (2) The decrease may affect only one side of the balance, while the total figures may remain the same. Why is the decrease viewed with especial apprehension if it affects exports? (3) Other things remaining the same, including the quantity of wares, there may be a decrease in the value of a country's commerce, due to a change in the level of prices. (4) The quantity and value of a country's commerce may remain the same, and yet be regarded as "declining" if the population of the country increases; the share of each person in commerce would be diminishing. (5) Similarly, a country's commerce may keep pace with its population, and yet be termed "declining" if the commerce of other countries increased more rapidly, so that the given country conducted a diminishing share of the world's trade. (6) Previous standards of "decline" have been based on quantity, measured either in bulk or value, but there may also be a decline in quality. A scientist might gain more income if he adopted the trade of an artisan, but he would be thought, nevertheless, to lose in rank. Endeavor to make clear to yourself the significance of each one of these various changes, and be prepared to distinguish them as you study the commercial tendency of different countries. Find examples of as many of them as you can.

2. Pick from following sections a concrete example to illustrate each each of the three heads suggested in sect. 452.

3. English industry and Eastern competition. [R. S. Gundry, in Fortnightly Review, 1895, 64: 609–620.]

4. Recent history of elementary education. [Mathew Arnold in Ward, Reign, 2: 238 ff.; F. E. Smith in Fortnightly Rev., 1912, vol. 97, p. 400 ff.]

5. How trade unionism affects British industries. [E. A. Pratt, Trade unionism; B. Taylor in North Amer. Review, 1901, 173: 190–207; in defense of trade unions cf. Edwards in Contemporary Review, 1902, 81: 113–128, and writings of Sidney and Beatrice Webb.]

6. Technical education in England. [Rawson in Contemp. Rev., 1901, 80: 584–598.]

7. Reasons for decline of the English silk trade. [Parker in National Review, 1895, 26: 212–225.]

8. Relative strength of modern countries in manufactures. [Schoenhof in Forum, 1901, 31: 89–104 (statistical); Browne in National Review, 1899. 33: 568–580 (espec. U. S.).]

9. Faults of English mercantile organization. [Lambert in Nineteenth Century, 1898, 44: 940–956; Greenwood in same, 1899, 45: 538–547.

10. Meaning of "dumping"; effects; means of prevention. [Ashley, Tariff problem; Marshall, Industry and Trade.]

11. Balfour's view of the commercial situation. [A. J. Balfour, Economic notes on insular free trade, N. Y., Longmans, 1903, $.30; Tariff reform, $.10.]

12. Criticism of Balfour's proposals. [Quarterly Review, 1903, 198: 613–648.]

13. Chamberlain's view of the commercial situation. [Chamberlain, The policy of imperial preference, National Review, 1903–4, 42: 351–370.]

14. Discussion of Chamberlain's proposals. [Nelson in North Amer. Review, 1903, 177: 183–191; Goschen in Monthly Review, 1903, 12: July, 38 ff.; Quarterly Review, 1903, 198: 246–278; Edinburgh Review, 1904, 200: 449–476.]

15. The project of an imperial customs union. [Mahan in National Review, 1902, 39: 390–408; Colquhoun in North Amer. Review, 1903, 177: 172–182; Giffen, in Nineteenth Century, 1902, 51: 693–705; Bastable in Econ. Journal, 1902, 12: 507–513.]

BIBLIOGRAPHY

I cannot attempt a survey of the vast literature which has sprung in recent years from the discussion of the proposal to change the commercial policy of England.

A bibliography of 38 pages compiled under the supervision of A. P. C. Griffin, Select list of references on the British tariff movement (Chamberlain's plan), was published at Washington, 1904. For a defense of the protective policy the reader may see Ashley, Tariff problem; for representative statements of the free trade views see William Smart, The return to protection, London, Macmillan, 1904; and L. G. C. Money, Elements of the fiscal problem, London, King, 1903. Considerable historical importance attaches to the books by Gastrell and Williams, which did much to arouse interest in the great commercial question of the day. Useful surveys are provided in translations of two foreign works, Carl J. Fuchs, The trade policy of Great Britain, London, 1905, and Victor Berard, British imperialism and commercial supremacy, London, 1906.

Reading of a more substantial character is offered in books which analyze the organization of industry and discuss the merits and defects of the English. For a survey from the standpoint of theory see Alfred Marshall, Industry and Trade, London, 1919, which is adapted only to advanced students, and for more concrete discussions, suited to topical reading, Arthur Shadwell, ** Industrial efficiency, London, 1906, two volumes, reprinted later in one; Sydney J. Chapman, ** Work and wages, 3 vol., 1904–14. Interesting comparisons of methods and results in England and in the U. S. will be found in Report of the Moseley Industrial Commission, London, 1903, American engineering competition, N. Y., 1901, and Causes of decay of a British industry, (gun-making), by "Artifex" and "Opifex," London, 1907.

The analysis of commercial statistics in Schooling and Fuchs is supplemented by later studies to be found in the Journal of the Royal Statistical Society.

CHAPTER XXXIX

THE GERMAN STATES

468. Connection of the commercial and the political development of Germany. — Standing next to England in the extent of its commerce about 1900 is a country which at the beginning of the century, if not among the last, was certainly far below the leaders. This country is Germany. We shall have to note, in this sketch of commercial development in the nineteenth century, two remarkable examples of commercial expansion. One of them, furnished by the United States, was due to the spread of a people, originally small, over a great area rich in resources. The other, furnished by Germany, was due to different causes. The Germans of 1800 occupied a territory not greatly different from that which composed the Germany of 1900, and to which nature has given but a moderate endowment of resources. There was no Germany at the earlier date, however; the people were divided up among a great number of petty states, and their economic forces were cramped thereby so as to hinder their development. The commercial progress of the century has depended largely on the reform of these political conditions.

469. Summary of the political development. — It will be necessary, therefore, in the following pages, to refer frequently to the events of political history, and for the convenience of the reader a brief summary is here given of the course of that history. The Napoleonic wars wiped out the smallest and most backward of the German states, reducing the number from over three hundred to about forty. Then, until near the middle of the century, progress depended on negotiations between these states by which the worst effects of their separation were removed. In 1848 a liberal movement reformed the government of some of the important states on modern lines, and strengthened the demand for a unified Germany, leaving still undecided, however, the question whether Prussia or Austria was to be the leading state. The war of 1866 between the two states gave the leadership to Prussia; and the war of 1870 with France led finally to the foundation of the modern German Empire, under which at last the people found room for commercial expansion and advanced with astonishing rapidity.

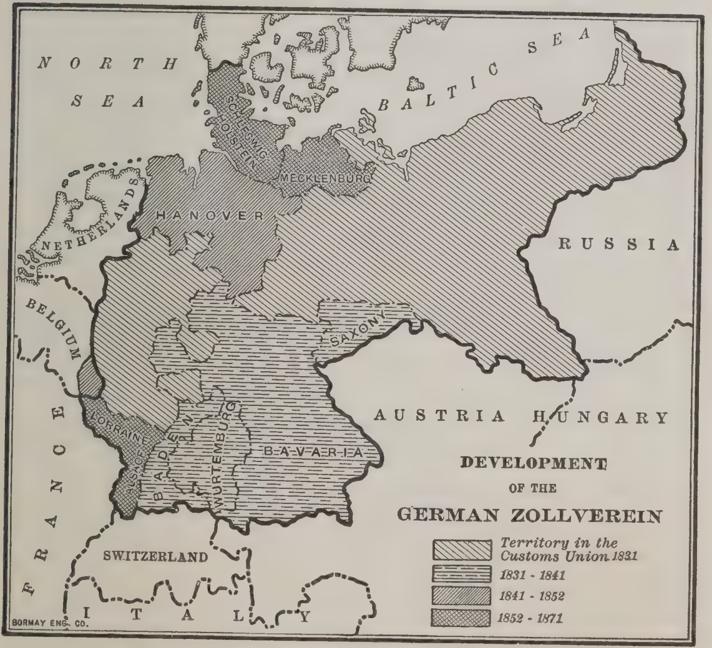
470. Conditions of Germany about 1815. — In spite of the service which Napoleon did Germany by abolishing the smallest states, the country was still splintered into pieces in 1815. A network of tariff frontiers covered the land, cutting the great rivers and the natural high-roads of commerce, and preventing the movement of wares. Not only did each state have its own tariff; some had internal tariffs in addition. The single state of Prussia had altogether some sixty tariffs. Some of the states were made of scattered pieces, interspersed among the territories of their neighbors; even a small state might consist of eight or ten fragments. A merchant, to reach the center of the country from the national frontier, crossed about sixteen tariff boundaries.

Not only the customs tariffs consumed time and money. The separatism which they represented spread into all parts of the organization; there were seventeen different postal systems in the country; nearly threescore different laws on bills of exchange; hundreds of different coins.

471. Backwardness of commerce and manufactures. — The difficulties of internal commerce were so great that the life of the people was arranged in large part to enable them to exist without trade. Most of the people were engaged in agriculture and supplied themselves with nearly all the necessaries of life. Manufactures were still carried on almost exclusively by scattered artisans. The German governments still clung to the old ideas of the gild system and public regulation. Little by little these ideas fell into the background in the first half of the nineteenth century, but it is important to note that they were still a living force in Germany when England had discarded them and was in the full rush of the developing factory system.

472. Factories dependent on antiquated sources of power. — Hindered in development by the persistence of old institutions, and by the lack of any considerable market for the product, German manufactures remained on the same stage on which they had been for centuries previously. Even the textile and mining industries were conducted according to the time-honored methods of the past; little progress had been made in the application of machinery, and the steam-engine was practically unknown. In Electoral Saxony, the seat now of a great cotton and woolen manufacture, all spinning was done by hand up to 1786, and in 1812 the small factories were still dependent on this source of power. The factories of medium size got their power from oxen and horses; only the large factories were run by water; and no spinning was as yet done entirely by steam.

473. Commerce small, and marked by the export of raw materials. — No statistics exist which would give an accurate picture of the development of German commerce in the early part of the nineteenth century, but we can gain some idea of its backwardness from an estimate made for so late a date as 1842. At this time German foreign trade was little over *one-tenth* of what it was in 1900, and it must have been considerably less in earlier years, before the reforms which will be described immediately. The fact that the country was predominantly agricultural is shown in the fact that the most important items in export were raw materials and foodstuffs, especially grain. The industrial population had not advanced far enough to work up even the raw wool produced in the country, of which considerable quantities were exported to England. Germany did export, it is true, a number of manufactured wares, but they were in general those which could be made from raw materials produced at home, and in the manufacture of which cheap hand labor was still the important factor. In the products, however, affected by the improvements which had been introduced in English factories, Germany confessed her weakness, and purchased large quantities of yarn and iron of English manufacturers for use inside the country.


DEVELOPMENT OF THE GERMAN ZOLLVEREIN

474. Formation of the Zollverein (customs union). — Such conditions called forth, naturally, remonstrances from the mercantile classes. Business men and manufacturers in all parts of Germany began soon after 1815 to agitate for a reform. We must content ourselves with noting only the main steps. Tariffs inside the separate states were reformed, and the navigation of the great rivers was made easier. Finally, and most important, the separate states began to draw together in groups, forming a customs-union (*Zollverein*), with a common tariff on the frontier and with free trade inside. The movement, slow at first, culminated rapidly in 1828, when three such groups were formed, one in the North (Prussia and others), one in the South (Bavaria and Würtemberg), and a third including states from central Germany to the coast. No state liked to remain isolated when consolidation had once begun. Out of this transition stage there had developed by 1834 one great union, embracing about two-thirds of the area and population out of which the German Empire was later to be formed. From this time the union grew more slowly, but the people within it could now afford to wait, utilizing its new commercial opportunities, and confident that the other Germans could not long resist its attractions.

475. Development following the formation of the Zollverein. — The introduction of free trade inside of Germany was opposed then, as the establishment of free trade in the world at large would be now, by producers who feared the competition of others in the same line of business. Some producers lost by the change, and were compelled to seek other lines of work. Many manufacturers, however, who opposed the change because they feared it would hurt them, found that it led actually to a great increase in prosperity; it extended their market and gave a rich reward to those who best served their customers. German manufactures developed and began to supply a demand which before had been met by purchases abroad. The importation of foreign manufactures was checked, while there was an increase in the imports of raw and half manufactured materials (dyes, coal, iron) and of colonial products (sugar, coffee), indicating a growth in industrial power and in welfare. The non-industrial population gained both as consumers, by the better supply of manufactured wares, and as producers, selling products to the developing industrial class.

476. Protection and the free-trade movement. — The tariff of the Zollverein of 1834, based on the liberal Prussian tariff of 1818, was less restrictive and less complicated than that of most of the European states of the time. Duties which had been moderate, however, at the time when they were framed, became protective or prohibitory as prices fell; and some changes toward protection were made consciously to stimulate manufactures or to retaliate against other countries. About the middle of the century the current set in the other direction. Germany was still an agricultural country, exporting grain, and the agricultural classes secured the aid of merchants and of political liberals in a contest for lower duties.

477. Political factors in the tariff question. — The free-trade movement was curiously intermixed with matters of national politics, especially the question which was acute from 1848 to 1866, whether Prussia or Austria was to lead in the unification of Germany. Austria had not entered the Zollverein, partly because the Austrian government had retained the protective or prohibitive duties of the previous century, and was unwilling to reduce them by entering the German customs union. It was the policy of Prussia, therefore, to keep the duties low and to make them even lower, that Austria might be excluded from influence on the other German states. Neglecting the details, which are extremely complicated, we may note only the result, which was a victory for Prussian statesmanship and for the free-trade party. Treaties with France and with many other states reduced the duties far in the direction of free trade.

478. Reaction in customs policy after the founding of the German Empire. — At the time of the foundation of the German Empire, therefore, the tarriff was low and the free trade movement was in the ascendant. The free traders gained one more victory, in 1873, by securing the abolition of the duties on iron; and in 1877 about 95 per cent of all imports entered duty free. This victory of the free traders was their last. The founding of the empire stimulated the growth of national feeling, and "Germany for the Germans" was a rallying cry of which the protectionist made good use. A great commercial crisis, following the war and the expenditure of the huge indemnity received from France, caused urgent demands for relief from the manufacturers who had greatly extended their works and found now that they could not market the product at profitable prices. Of the iron producers it was said that one-third could continue under the existing tariff, that one-third could continue only with the aid of protection, and that one-third were bound to be ruined whether they received protection or not.

479. Return to protection in 1879. — Even the agricultural classes now joined the protectionists; they found their foreign market appropriated and their home market threatened by grain imports from Russia, America, and India; they were largely in debt and were paying the heavier taxes of the empire. Finally, political factors united with the economic to induce a change. Bismarck found it politic to reverse his position and to advocate protection instead of low duties or free trade; with remarkable adroitness he engineered the change which was realized in the tariff of 1879. The existing duties on manufactures were raised; old duties which had been abolished were restored; and duties protecting agricultural products were introduced. This tariff, with changes which we shall notice later, has formed the basis of the existing tariff.

QUESTIONS AND TOPICS

1. Review in one of the smaller manuals of European history the course of political development in Germany during the century.
2. Political condition of the German states at the beginning of the century. [Seignobos, first parts of chaps. 12, 14; Henderson, vol. 2, chaps. 6, 7; Bigelow, vol. 3, chap. 1.]
3. The Zollverein. [Rand, Ec. hist., chap. 8; Bigelow, vol. 3, chap. 4; Seignobos, end of chap. 14.]
4. The Prussian tariff of 1818. [Bigelow, vol. 3, chap. 17.]
5. The conflict between Prussia and Austria. [Henderson, vol. 2, chap. 9; Seignobos, chap. 15.]
6. The return to protection. ["Veritas," chap. 5.]

BIBLIOGRAPHY

The best single reference is J. H. Clapham, ** The economic development of France and Germany, 1815-1914, Cambridge, 1921. Ogg, ** Econ. development, chap. 10, industry, and chap. 14, commerce, is brief on the earlier part of the century but gives notably full bibliographies.

A bibliography of Germany, including references to a number of articles in English will be found in Homans, Cyclopedia of commerce, N. Y., 1858, p. 814. The student who is confined to reading in English must seek in Homans, M'Culloch and similar books, or in the general encyclopedias published before 1870, the descriptions there given of German commerce in the earlier parts of the century. Most of the English reading which is readily available takes up economic development only in connection with political history. Topical references have been given above to the general narrative histories: ** Seignobos; Ernest F. Henderson, A short history of Germany, 2 vols., N. Y., Macmillan, 1902; Poultney Bigelow, History of the German struggle for liberty, 3 vols., N. Y., Harper, 1896-1903. An anonymous book, by "Veritas" The German Empire of to-day, London, Longmans, 1902, includes chapters on the history of German commercial policy which make it a convenient source of information to readers of English. The best book in English, however, on German commercial policy is W. H. Dawson, ** Protection in Germany, London, King, 1904, which covers the whole century; it is a book to be studied, not merely read. A valuable summary of the history of German American commercial relations throughout the nineteenth century is given by G. M. Fiske in Review of Reviews, N. Y., March, 1902, 25: 323-328.

CHAPTER XL

GERMANY UNDER THE EMPIRE

480. Effect on economic development of the establishment of the Empire. — Leaving now the topic of commercial policy until we return to it in a concluding paragraph, we must attend to the material development of Germany. Down to the foundation of the Empire in 1871, progress, if steady, still was slow. The best energies of the people were absorbed in the great political conflicts out of which united Germany was to emerge; delicate questions of the relations between the German states had to be settled, and much needed still to be accomplished in the reform of industrial legislation inside the states. As late as 1862 it was estimated that five-eights of the people were still engaged in agriculture or in other extractive industries. In comparison with this period of preparation the progress which Germany has made since 1871 is startling. The direct gains which Germany made in the war with France, the acquisition of the rich provinces of Alsace and Lorraine, and the receipt of about $1,000,000,000, as a war indemnity, were large, but still they were less than the indirect results: the establishment of national unity on a lasting basis, freeing the people from political anxieties, and encouraging them to face their economic problems with a new energy and pride in their strength, and with a new hope in the future. This political factor, vague and intangible as it may be, is still most important; without it the recent economic development of Germany could be regarded only as a miracle.

481. Development of commerce, 1870–1913. — In the period between the founding of the Empire and the outbreak of the

World War the population of Germany increased from 41 to 67 million, about 63 %, while the foreign trade increased almost exactly 250 %, *four*-fold as fast. Comparing the figures in the accompanying table with those given for the United Kingdom in a preceding chapter we see that in 1872 the Germans were much behind the English, separated roughly by an interval of ten years of development, but that they were closing the gap as time passed, and at the end of the period had passed the English in the value of their export trade.

Special Commerce of Germany, Selected Years in Milliards of Marks and of Dollars.

	Imports		Exports	
	Marks	Dollars	Marks	Dollars
1872	3.5	.9	2.5	.6
1875	3.6	.9	2.6	.6
1880	2.8	.7	3.0	.7
1885	3.0	.7	2.9	.7
1890	4.3	1.1	3.4	.8
1895	4.2	1.1	3.4	.9
1900	6.0	1.5	4.8	1.2
1905	7.4	1.9	5.8	1.5
1910	8.9	2.2	7.5	1.9
1913	10.8	2.7	10.1	2.5

While in 1871 60 men out of 100 were engaged in agriculture, the proportion had fallen in 1907 to 27. The change was brought about not by an absolute decline of the number in agriculture, though sometimes that was observable, but by the young men leaving the country for the mines, factories, and commercial centers. Germany had in 1840 only 12 cities of over 100,000 inhabitants, while at the end of the century it had 28, of which the chief, Berlin, was growing more rapidly than Chicago; and in 1910 it had 48. The industrial development during the generation ending in 1900 may be inferred from the following: coal production increased over 250 per cent, pig iron production nearly 400 per cent, and shipping 500 per cent.

482. Character of recent German commerce. — England was characterized in a preceding paragraph as "offering one of the most remarkable examples of advanced commerce in the world." In an earlier period England stood alone; it offered *the* most remarkable example. In 1913 Germany stood alongside England, not merely as regards the quantity but also as regards the quality of her trade. In Germany as in England manufactures formed the major part of the exports; their proportion of the total value approached if it did not reach the English. Exports of raw materials and crude food stuffs had declined to less than one-quarter of the total, and among exports of this character coal, as in England, took the dominant place. On the other hand the imports of raw material and food stuffs had grown until they amounted to about three-quarters of the total imports. Of the total value of imports finished manufactures formed only 13 per cent, a proportion actually less than that of the English, whose policy of free trade permitted wares to be brought in which were excluded from Germany by the customs tariff. If we arrange the wares imported in 1913 in the order of their value we do not find a single finished manufacture among the first 26 items, which include all those exceeding 100 million marks in value; crude copper was fifth on the list, but we find no product of factory industry until we reach the twenty-second item, woolen yarn, which itself was destined to feed the German factories and in large part to be exported in a finished form. To understand recent German commerce we need first of all, evidently, to study the development of Germany's manufactures.

483. Rapid development of factory industry.— Before the founding of the Empire most of the people engaged in manufactures in Germany still worked at home, with simple machinery and no steam power. In Saxony, for instance, now one of the industrial centers of the country, the manufactures of cloth, stockings, lace, etc., were still carried on outside of factories in 1868. The proportion of people working in this simple way is still large in Germany, but the number has declined in many lines of work (weaving, milling, shoemaking, etc.), and the great growth of the recent period has been in the modern factory industry. Since 1882 the rate of growth of the factory population has been about fourfold that of the general population. The results of this development have been indicated in the previous paragraph, and they furnish a striking contrast to conditions as they were at the time of the Centennial Exposition of 1876, when the German representative reported that in the industrial field Germany had received a defeat equal to two Sedans, that German industry produced only articles of poor quality and of slight value ("schlecht und billig"), and that Krupp guns were the only product of which the Germans could be proud.

484. Resources of coal and iron. — Germany was favored by some important physical resources in building up its modern industry. The country had a rich supply of coal, the great source of modern power, and took in Europe a place barely second to England in coal production, far ahead of any other country. Germany was well supplied also with the raw materials for the staple products, iron and steel. The ore supplies in the province of Lorraine, taken from France in 1871, are the most extensive in Europe. At the time when they were acquired they were thought to be of poor quality, because of the phosphorus contained in them, but under the basic process they were made to yield metal of excellent grade, and in addition a valuable fertilizer, obtained from the phosphate slag. Germany has developed its iron resources with a rapidity exceeded only in the United States. It contributed only one-twenty-seventh of the world's iron supply in 1866, but had raised its share to one-sixth at the end of the century, and to about one-fourth before 1914. It passed England in steel production shortly after 1890, and in iron production about ten years later; it raised constantly the figure of its output while that of England remained relatively stationary, and in the decade before the war it was advancing at a rate sevenfold that of England.

485. Quality of the people. — The richest resource of Germany, however, was its people. The past poverty of the country and the trials through which it had gone nurtured a steadiness and thriftiness among the working classes which made them admirable members of the modern productive organization. An effective system of elementary education was established in parts of Germany long before a similar step had been taken in most other countries; and practically all the people had not only the rudiments of education, but also, what is perhaps more important, a respect for knowledge, a desire to learn and to make the best use of their learning, which were in striking contrast with the careless spirit of other peoples. It has been said that it was the primary schoolteacher who won for the Germans the victories of 1866 and 1870; and the Germans could hope now to beat their industrial rivals as they beat their military opponents, by method and steady application rather than by brilliancy and dash.

486. Superiority in technical training. — The effects of careful training were as evident in the class of the responsible managers of Germany's industries as in the laboring class. Nowhere in Europe had technical education reached so high a development. Not only were the appliances, methods, and system of organization superior to those of other states; the technical schools reached a larger part of the population, training them not only in the fundamental subjects of science, but also in the special branches of production (mining, weaving, dyeing, etc.).

The results were everywhere apparent in German industry; to instance chemicals, sugar, glass, and electrical appliances is to pick only a few examples from a list which could be greatly extended. Especially noteworthy was the readiness of the Germans to adopt a new process or machine which was first brought out in some other country. Englishmen invented processes to make a fast black aniline dye, to manufacture potassium cyanide for the reduction of gold, to make steel by the basic process; all these inventions were developed first into commercial successes in Germany. The Germans imported, if necessary, foreign machinery and foreign foremen to superintend its action, until they had mastered the principles of operation and had firmly established the industry in its new home.

487. Efficiency of the mercantile organization. — Similar considerations account for the success of the Germans in commerce, and explain the rapid development of their export trade. They took pains to find out what wares their customers wanted, and to sell them when they had been made. The report of a consul of the United States in Chile suggests the methods which led to their success. "Thirty years ago," he wrote in 1902, "the trade coming to the Pacific ports was monopolized by the British and a few American houses. The Germans were represented only by jobbers and shopkeepers in the coast towns. The Germans, appreciating the importance of this trade, made well-conceived plans to gain it. They carefully trained a number of able young men. When these were versed in commercial affairs and in the language of the people among whom they were to live, considerable shipments of goods were made to the British and American houses, and the young men found places as clerks and were given special charge of these consignments. They remained there till they acquired a complete knowledge of the coast trade; then they were provided with ample funds and stocks and opened German houses, with brilliant success. In many branches they now have a monopoly, and the British and American houses no longer attempt competition."

488. Commercial travelers and trade papers. — No country in the world had commercial travelers so well trained, especially in the command of languages, as Germany. The Germans were said to be the only foreign people who had a thorough knowledge of Russia in a business way; they were able to meet the demand for long credits in that and other eastern countries, and so build up their trade and still avoid serious losses. The exporters were not content with sending abroad their ordinary trade catalogues, as were the English, Americans, and others; they sent personal representatives speaking the language of the country, or at least reached a prospective customer by some communication in his own language. Trade papers for foreign circulation were printed in Germany in the following languages: English, French, Russian, Spanish, Portuguese, Turkish, Japanese, and Chinese.

489. Other factors in commercial development. — The rapidity of their industrial and commercial development forced a departure from the methods of the past, and stimulated new forms of co-operation in business. The same period which was marked in the United States by the rise of the great aggregations of capital known generally as "trusts" produced in Germany the "cartel," of a somewhat similar nature, which had its shady sides but which made some very important contributions to efficiency in the making and marketing of goods. German banks followed a course which in contrast to the conservative methods of the old established banks of England and the United States appeared speculative, but which in this period when so many conditions were favorable proved immensely profitable and effective. The great German banks promoted and financed to a successful conclusion many new enterprises in industry and trade. The government played an active part, not merely by such services as were expected of the State in other countries, but also by more positive contributions. Its control of internal transportation, by the system of state-owned railways and canals, gave it great power in directing and assisting economic development; and it supported most generously the development of shipbuilding, and the extension of German lines of shipping, for the benefit of the exporter.

490. Deductions to be made in estimating German progress. — We must note some factors which help to account for the great development of German commerce, but which should be offset by other considerations, and which therefore do not represent net contributions to the world's welfare. The Germans themselves were being taxed for the particular benefit of the export trade. The government so far as possible freed the export industries from the burden of the tariff, which weighed heavily on some classes in the country, and beyond that, gave actual bounties to stimulate exports. These were commonly concealed, for instance in the form of special rates in transportation, but had nevertheless to be paid out of the pockets of the German taxpayer and business man. Furthermore, private organizations followed substantially the same practice. The great "cartels," kept prices high at home to gain resources with which they might finance their fight against competitors in foreign markets. They won much trade, but they won it at costs, borne sometimes by Germans and sometimes by outsiders, which need to be taken into account if a fair balance is to be struck. Finally, there must be put on the debit side of the account some gains which the Germans made in commerce, not by greater efficiency but by less honesty: by the imitation of trade marks, by the bribery of agents, etc. In this regard they were not the only offenders. They did not win the bulk of their trade in this way. Their departures from accepted standards of commercial morality were, at least, sufficient to establish for German trade methods an unenviable reputation.

491. Examples of German success in trade. — If we add all these influences helping Germans to market their goods, to those which enable them to manufacture to advantage, we can understand the development of the German export trade, and can see why German wares, even when they were no better than the wares of other countries, won foreign markets. A French brewery got the first prize at Baden Baden, but German beer was sold all along the Parisian boulevards. German brewers sent an increasing amount of their beer to the British colonies and India, because they had learned not only all that English brewers can teach them, but they had learned, too, the tastes of their customers in distant countries, and had adapted their product to suit these tastes, while English brewers clung fast to the old methods. They had greatly extended their trade in textiles, carpets, etc., "not so much because they are cheaper, as because they are quicker and more dexterous in fitting their supply to the changing demands of the market." They had taken away a large part of the French export trade in dolls, by taking pains to fit the doll for the country to which it is going, getting English cloths in which to dress a doll for England, reproducing exactly national types of furniture, etc. German wares, wrote the British consul at Paramaribo, displaced Sheffield wares in his district, not because they were more serviceable, but because they were cheaper, were polished and painted, and arranged for display in shop windows, while the English wares were laid away in brown paper on a shelf. Measuring German commerce as we have measured that of England, by noting the percentage which German sales to any country formed of the country's total imports, we find that in the period from 1881 to 1909 Germany's share of sales fell off in only one foreign market of importance, the Netherlands, and, on the other hand, its share grew, and in some cases grew greatly, in nine of the ten great markets of the world.

492. The German tariff and the agrarian party. — It is impossible to say just how far the progress of Germany in this period was furthered by the government's commercial policy, for, as will appear, this policy retarded development in some lines to favor it in others. This, at least, may be said with assurance, that the policy was strikingly characteristic of the attitude of the German state, and throws much light on the conditions preceding the outbreak of the World War. The recent history of commercial policy in Germany may be discussed under two aspects: its relation to domestic politics and its relation to foreign politics.

The protective tariff of 1879 was designed particularly to favor the growing manufactures of the country. Agriculture had been in the past an export industry, and the agrarian representatives had favored free trade. Already, however, there were signs of that far-reaching change by which cheap food stuffs from distant parts of the world were enabled to undersell the domestic product; and a moderate protective duty on the cereals was granted in the tariff of 1879. The German producers of bread stuffs and meat found, however, that they had underestimated the danger to which they were exposed, and that they could keep their home market only by sacrifices which appeared to them desperate. They obtained additions to the duties; they managed, under the guise of sanitary precautions, to subject the importation of certain foods to expense and delay, even when it was not altogether prohibited; and in the general revision of the tariff, in 1902, they obtained not only a general increase in the agrarian duties but also a specific provision which prevented the government from reducing these duties below a certain point, in treaties which it might make with other powers. These favors to the agrarian interest were accompanied by the revision of rates in the interest of manufacturers, but the government was evidently taking with one hand from the producer what it appeared to offer him with the other hand. There is unmistakable evidence that the higher duties on food stuffs restricted consumption and checked the rise in the standard of living. The policy threatened to impair the ability of the industrial and mercantile classes to compete with foreign rivals who were not thus burdened in getting the necessaries of life. On the other hand, it offered but slight advantage to the major part of the German agriculturists, who carried on mixed farming on a small scale; its benefits were mostly restricted to the owners of large estates, east of the Elbe river, who specialized in the production of grain and meat with hired labor. What, then, is the explanation of the policy? It was, to use the German phrase, a *Machtfrage*, a question of power. The characteristic agrarian was a Junker, a Prussian squire, devoted to the military ambitions of the Hohenzollerns, endowed by custom and indeed by law with superior political influence. In spite of its industrial development, and in spite of some democratic features of its constitution, Germany was still at heart a military monarchy. The course of policy was determined by reference not to the general economic welfare, but to the interests of those special groups which shared the political and military traditions of the Prussian monarchy.

493. International aspects of German tariff policy. — Likewise in foreign relations German tariff policy was colored by the traditional Prussian view that commercial competition was not merely the struggle of individual producers and merchants, but was a group conflict, in which the state should take an active part, making the most of the particular weaknesses of states opposed to it. In 1871 Germany had forced France to subscribe to the principle that each country would grant the other all commercial favors accorded another power. Being a part of the treaty of peace this provision was interminable; it could be amended only by formal treaty. Germany at the time appeared to get more than she gave. As she realized her industrial and commercial strength, however, she became dissatisfied with a position of mere equality. About 1890, under Chancellor von Caprivi, Germany began the policy of making special bargains with individual states by treaties fixing the tariff rates. In the negotiations with Russia each party stood out obstinately for certain favors, and since agreement appeared impossible each party sought to punish the other by imposing punitive rates, amounting to prohibitions. This war of tariffs lasted less than a year, for it affected so disastrously the commerce between the two countries, that each was glad to reach an agreement by mutual concession. The same spirit, however, which marked this contest, appeared in the commercial relations of Germany with other states; she conducted similar tariff wars against Spain and against Canada, and seems to have meditated like action against the United States but prudently refrained from a breach with a country which was approaching industrial independence and which was the source of indispensable raw materials.

494. The tariff of 1902; Central Europe. — Before the treaties framed under Count Caprivi were due to expire Germany prepared for another commercial campaign. A new tariff was passed in 1902, but was held in suspense until treaties could be negotiated under it, and was not put into effect until 1906. The new tariff was ingeniously devised to enable Germany to offer special favors to individual countries, in spite of nominal adherence to the principle of granting to every country with which a treaty was made the concessions granted to the most favored nation; and gave to the government, on the other hand, if occasion demanded, the power to wage commercial war by the imposition of triple duties. Germany is commonly supposed to have driven some hard bargains in the treaties that were framed under this act, but did not have recourse, as in the preceding period, to tariff wars as a means of opening foreign markets. Still, the practice of bargaining for commercial advantage by treaty, which Germany had so vigorously developed, introduced a tension in international economic relations that caused the states of Europe to look forward with apprehension to the years 1917–1918 when the important German treaties expired. The project of a customs union of Central Europe, which had long been discussed in an academic way, and which appeared to many Germans in the early years of the World War as a practicable plan, shortly to be realized, did not propose to introduce free trade immediately among its member states, but it did promise to assure Germany such dominance over the others that she could use not only their economic but their military resources as well, to further her plans for commercial expansion. The plan was characteristic of German ambitions, a summary of the tendencies that had long been manifesting themselves in German policy, and a significant index of results that would have followed if Germany had won the war.

QUESTIONS AND TOPICS

1. What other examples can you find of countries apparently invigorated by a war for independence or national unity?

2. Recent political development of Germany. [Seignobos, chap. 16; Dawson, chap. 11; Schierbrand, chap. 6.]

3. Development of commerce under the Empire. [Whitman, chap. 12; Dawson, Evolution, chap. 4.]

4. Prepare, in the manner suggested in the chapter on England, graphic representations of the chief imports and exports. [Statistics in Statesman's Year-Book.]

5. Recent commerce of Germany. [Schierbrand, chap. 13; Arndt, Germany in international commerce, International Monthly, 1902, 5: 526–546; Bernstein, Growth of German exports, Contemporary Review, 1903, 84: 775–787; Williams, Made in Germany — five years after, National Review, 1901–2, 38: 130-144; Gastrell, chap. 8 (statistical).]

6. Development of factory industry and condition of factory labor. [Dawson, chap. 3.]

7. The Krupp iron works. [Schierbrand, chap. 14.]

8. Methods and results of education. [Dawson, chap. 6 Schierbrand, chap. 18.]

9. Various reasons alleged to explain German superiority in manufactures and commerce. [Williams, Made in Germany, chap. 7.]

10. The German chemical industry, [O. Eltzbacher, in Contemporary Review, 1904, 85: 627–639; or Barker, Mod. Germany, chap. 25.

11. Effect of education on the mercantile organization. [Findlay, Genesis of the German clerk, Fortnightly Review, 1899, 72: 533–536; Bashford in Fortnightly Rev., 1905, 84: 692–707.]

12. The German colonial movement. ["Veritas," chap. 7; Schierbrand, chap. 20; Birchenough in Nineteenth Century, 1898, 43: 182–191; Keller, Colonization, chap. 14; Dawson, Evolution, ch. 18, 19.]

13. Development of German shipping. [Bashford in Fortnightly Review, 1903, 79: 287–302; Schierbrand, chap. 15: Barker, chap. 24.]

14. German transportation system and policy. ["Veritas," chap. 6: Dawson, Evolution chap. 11: Barker, chap. 22, 23.]

15. German tariff policy to about 1890. [Villard in Yale Review, 1892–3, 1: 10–20.]

16. Commercial treaties about 1890. [Farnam in same, 1: 20–34.]

17. The agrarian movement. [Schierbrand, chap. 9.]

18. Tariff policy about 1900. [Schierbrand, chap. 12; Schoenhof in Forum, 1901-2, 32; 105–115; Eltzbacher in Nineteenth Century, 1903, 54: 181–196; H. Dietzel in Quarterly Jour. of Econ., 1902-3, 17: 365–416; W. H. Dawson in Econ. Jour., 1902, 12: 15–23.]

19. Effects of German tariff policy. [Lotz in Econ. Journal, 1904, 14: 515–526; Mann in Contemp. Rev., 1905, 87: 347–358.]

20. German methods in the commercial penetration of a particular country. [See articles in the Quarterly Rev., as follows: U. S., July, 1919, 232: 16–37; France, 1916, 225: 383–399; Italy, 1915, 224: 136–149; Turkey, Oct. 1917, 228: 296–314.]

21. German banks and "peaceful penetration." [McLaren in Quart. Rev., Jan. 1919, 231: 76–96.]

BIBLIOGRAPHY

Readers of English will find the recent commercial history of Germany treated more fully than that of any other country of the Continent. Besides the books by Clapham and "Veritas," named in the preceding chapter, may be mentioned: S. Whitman, Imperial Germany, 1901; W. H. Dawson, German life, N. Y., 1901, and ** Evolution of modern Germany, revised edition, 1918; W. von Schierbrand, * Germany, N. Y., 1902 (better than the later editions); J. Ellis Barker, Modern Germany, various editions of which the fourth, N. Y., 1912, is to be preferred. Dawson, Protection, and Ogg will continue to be of service in this period; and reference may also be made to report of the U. S. Tariff Commission, 1919, on Reciprocity and Commercial Treaties, 467–487.

G. A. Pogson, Germany and its trade, London, 1903, is a compilation of statistics for the period preceding 1900, and a convenient statistical survey for the period since that date is given by Helfferich, Germany's economic progress, Berlin, 1913.

Arraignments of German business methods will be found in A. D. McLaren, Peaceful penetration, London, 1916; H. Hauser, Germany's commercial grip on the world, London, 1917; Millioud, The ruling caste and frenzied trade in Germany, London, 1916; Claes, The German mole, London, 1915, (for Belgium).

CHAPTER XLI

FRANCE

495. Condition of France before the Revolution. — France was considered, as the reader will recall, the richest and most powerful state of Europe till near the end of the eighteenth century. The population of the country was more than double that of Great Britain, the resources were envied by all other nations, the commerce was exceeded only by English commerce and surpassed that in some respects. The French sugar colonies were considered the most valuable colonial possession in the world, and France surpassed England in trade with her direct neighbors (some of the German states, Italy, Spain). Under the political and economic system, however, which had fastened itself on the country in the course of time, growth was hampered; and opposition rose until it burst out finally in the Revolution of 1789. Then followed a period of twenty-five years of rapid political change and of bitter war, ending finally with the defeat of Napoleon in 1815.

496. Effect of the Revolution. — The losses of France during this period in men, money, and colonial territory need only to be suggested; the effect of the wars on French commerce has already been described. It is proper here to emphasize the good of the Revolution. In appearance, at least, it swept away all the old institutions, and liberated the people from burdens which they had been bearing for centuries. It abolished the former class divisions and inequalities in taxation; it freed the agricultural classes, and extended the ownership of land; it amended the former restrictions on the pursuit of manufactures and handicrafts; and it established perfect freedom of trade inside the country.

497. Backward features of industry and commerce. — No country can make an entire breach with its past, and France after 1815 was more like France before 1789 than the reader may suppose. The people had not acquired the skill and boldness in industry and commerce which the English had won by generations of experience. The government after 1815 was still highly centralized, with strong absolutist tendencies, and moved more by personal influences than by far-sighted views of the welfare of the whole people. These facts appear in the course of commercial policy followed after the Restoration. France had made only the barest beginnings in the modern industries depending on coal and iron, and on the application of machinery, at the time of the Revolution, and though industries developed when commerce was interrupted by war, they were weak in organization and technique, and loudly demanded protection when peace returned, and opportunities for commerce developed.

498. The French tariff in the first part of the century. — The result was a tariff system which goes far to explain the sluggish development of French commerce in the first part of the nineteenth century. It gave protection to shipping, to agricultural products, from wheat to sumac and garden roses, to the raw materials as well as the finished products of industry. Colbert's tariff of 1664 and 1667 has often been cited as an example of high protection, but the French tariffs of the period before 1850 imposed still higher duties on some of the most important raw materials of industry (wool, cotton, flax, pig and bar iron, steel, alum); many duties had risen to a prohibitive height, and there were many actual prohibitions.

499. Sluggishness of industrial development. — At the time when England was building up her system of manufactures, when every decade was marked by some important step in industrial progress, France resolutely excluded herself from the influences which would have stimulated progress at home. While England was endeavoring to keep her improved machinery in the country, by forbidding export, France aided her by imposing on machinery duties running up to 100 per cent. Means to spin linen by machinery were invented by a Frenchman, Girard, in 1810, but were first utilized in England; and England could show nearly a million and a half spindles in 1849, against a quarter of a million in France. A Frenchman estimated in 1827 that the steam-engines in Great Britain amounted to a force of 6,400,000 laborers, while they amounted in France to but 480,000. About 1840 there were still less than 2,000 steam-engines in France. The French iron industry was far behind the English in efficiency and in output, but was secured the home market by protective duties, and built up large fortunes for the iron producers at a direct loss to the country estimated to be $10,000,000 a year, and an indirect loss far larger.

500. Effect of the tariff on commerce. — The effect of the tariff in checking commerce between the two great states in this period can be seen in the fact that in 1829 less than *one seventieth* of British exports were declared for France; England found better customers in Spain, in Turkey, or in Chile. The amount of trade was in fact somewhat larger, for smugglers evaded the restrictions of the tariff, and by a number of ingenious devices (including the use of trained dogs), succeeded in bringing wares to the people who wanted them.

This one example indicates how the French were losing the opportunities for commercial expansion which this period offered to them as to other peoples. No more striking commentary on the history of the commerce of France at this time can be furnished than the following fact: nearly sixty years after the French Revolution the special commerce of the country was only just beginning to exceed the figures which it had attained at the earlier date.

501. Reform of the tariff by Napoleon III. — The astonishing increase of French commerce in the decade 1850–1860 (from less than two to over five milliards of francs) was due chiefly to the reform of the tariff by Napoleon III. Attempts before this time to lower duties had failed because of the determined resistance and the strong political organization of tne protectionists, but the new Emperor enjoyed a position of exceptional strength, and was not fettered by the dependence on the manufacturing class which had stopped action by the previous government. By his mere decrees he lowered or suspended duties on agricultural products and on important raw material (coal, iron, steel, wool, etc.).

502. Effect of the reform on commerce. — French industry and commerce, checked so long in their development, responded with surprising quickness. In a period of little over ten years (1847–1859) the steam power of France increased over threefold. The commerce with England, which in the previous period of twenty years had merely doubled, now quintupled in ten years. With Portugal and Greece commerce quadrupled; with Germany, Switzerland, Brazil, etc., it tripled; with Belgium, the Netherlands, Spain, Italy, the United States, etc., it doubled. French commerce recovered its lost ground so quickly that, according to a French estimate, it amounted to more than three-fifths of English commerce about 1860, and the country took easily second place among the trading countries of Europe.

503. The free-trade treaty of 1860. — At the end of the decade which we have been studying, in 1860, the movement toward greater freedom of trade progressed still another stage by the ratification of a treaty of commerce between France and England. Free traders, of whom Richard Cobden was the chief, convinced the Emperor that France would benefit by a further reduction of duties. Cobden asserted that French operatives worked 20 per cent more time for 20 per cent less wages, and paid upwards of 10 per cent more for their clothing than the same class in England; and promised the Emperor that the French would share in the advantages of the English if they would only adopt a similar commercial policy. The Emperor, moreover, was desirous of winning the good-will and support of the English to strengthen his international position; and agreed to the proposals partly on this account. England abolished the duties on a number of articles of French origin, and reduced the duties on wine and spirits; while France removed all prohibitions on trade, and scaled duties down to about half their former amount in commerce between the two countries. This treaty, which was to last ten years from its ratification in 1860, is one of the turning-points in European commercial policy; it marked the extension of the free-trade movement from England to the other states of Europe; and it inaugurated a succession of similar treaties on the part of France and other states on the Continent.

504. Results of the treaty of 1860. — There had, of course, been opposition in France to the further reduction of duties; and many people prophesied that the movement to free trade would entail the industrial ruin of the country. The results did not justify these predictions. Commerce expanded greatly, as was to be expected; it grew in the period 1859–1869 from 5.4 to 8 or from 3.9 to 6 milliards of francs, according as the general or special trade of the country is taken as the standard of measurement. This commerce, however, was serving French industry and agriculture, and not destroying them. There was a marked increase in the importation of the raw materials of industry; the amount of wool and silk brought into the country for manufacture more than doubled in ten years, and in spite of the disastrous effects of the American Civil War there was a considerable increase in the importation of cotton. The use of coal and iron, both important indexes of industrial development, extended largely; and the population engaged in industry and commerce grew by nearly a million workers in the period 1861–1866. The increase in the products of French industry found a market both abroad and at home. The exports of manufactures increased, it is true, but slowly except in the case of special products; but the consumption of manufactures within the country extended greatly, as new purchasers appeared for wares which formerly had been beyond their means.

505. Return to protection after the war with Germany. — It has long been the misfortune of France to have her commercial and industrial interests at the mercy of politics; and at this point in her growth her progress was stayed by the outbreak of the great war with Germany. From the direct losses of the war the country recovered with a quickness surprising to those who did not realize the thrift and saving power of the French people. The war led, however, to the overthrow of the government of Napoleon III, and in time to the overthrow also of the liberal commercial system which he had established. Though the commercial treaties were allowed to continue for a few years, the tendency was strongly toward protection. It was a period of bad times in business, and French agriculture was beginning to feel the competitition of countries outside of Europe; the new French republic, with all its merits, lent itself too easily to the representation of class and sectional interests.

506. Growth of protective duties. — In 1881, therefore, a new tariff was established, which raised many duties about one quarter, though it allowed many of the higher rates to be abated by treaties with other states. Proposals to increase duties now multiplied. Not only manufacturing industry but also agriculture became clamorous for protection. The duty on a quintal (about 220 pounds) of wheat, which had been 60 centimes since 1861, was raised to 3 francs in 1884, to 5 in 1887, to 7 in 1894. While in the past the agriculturists had been free traders they had become by 1890 almost a unit for protection, whether they raised wheat or cattle, grapes or sugar-beets, hemp or flax. In 1892 an entirely new tariff was adopted, considerably higher than that of 1881, affecting some important raw materials, and not affording the same freedom in the negotiation of commercial treaties.

507. Attitude of the French toward commerce. — A writer who published a study of the French tariff system in 1892 thought that public opinion would force a revision of the recent tariff if it checked the country's commerce. Such was actually its result. Exports and imports did not reach again the figures of 1892 for five and six years respectively. Nevertheless the protective duties were raised again in 1910 to a level far above that which prevailed in the neighboring states of northwestern Europe. The French had to choose between a career in commerce and the maintenance of the traditional organization. They could not extend their trade without lowering the barriers of their tariff. This step they were unwilling to take, apparently because it would have entailed efforts and sacrifices in the readjustment of their industries. The caution and disinclination to change, which mark the great peasant population of the country, appear to have determined the course of commercial policy, and to have decided the French to hold fast to what they had, rather than to take the chances involved in a struggle for a higher place in the open market of the world. In such a struggle they were at a disadvantage, because of the scarcity of their mineral resources and still more because of the many backward features in their industrial organization. On the other hand they could comfort themselves with the reflection that few if any of the neighboring states were qualified as were they to renounce the possible benefits of trade. The great agricultural resources of the country make possible an approach to self-sufficiency which elsewhere could not be considered.

508. Statistics of French commerce in the recent period. — The table on page 429, presenting the course of French commerce in the period immediately preceding the outbreak of the World War, illustrates what has been said regarding the checks imposed on commercial expansion; and provides the means of comparison with the commercial development of other countries.

509. Position of France in recent commerce. — In matters of taste and of artistic finish, in which personal aptitude and training are the important factors, the French remained unrivaled; in production on a large scale, in which elaborate organization and the extensive use of machinery determine success, the French did not compare with English, Germans, or Americans. Thus the French, though always assured a respectable position in the commerce of the world, could not

Special Commerce of France, Selected Years in Milliards of Francs and of Dollars.

	Imports		Exports	
	Francs	Dollars	Francs	Dollars
1870	2.9	.6	2.8	.5
1880	5.0	1.0	3.5	.7
1890	4.4	.9	3.8	.7
1900	4.7	.9	4.1	.8
1910	7.2	1.4	6.3	1.2
1913	8.4	1.6	6.9	1.3

hope to share the progress which other nations attained by the export of cheap manufactures in great quantities. An Englishman said of the trade between his country and France in 1878, "Broadly it may be said France supplies us with our luxuries, and we minister to the necessities"; even at the close of the century this held true, in general, of the relations between France and the other great countries. France supplied objects of art, luxury, and fashion, delicacies and wines, and took from others in exchange the articles of solid utility, the product of mines and of power machinery.

510. Failure of the government in its attempts to stimulate commerce. — Attempts of the French government to stimulate commercial expansion have not met the expectations of their promoters. The government has built up a colonial empire about sixteen times as large as France, but most of the dependencies are in a backward condition, and their total commerce (including that of Algiers) was before 1914 only about one-quarter of that of France. So far France has lost money on her colonial enterprises, and there seems no likelihood, in view of the extremely small emigration from the home country, that she will recover it. Nor can the results of attempts to build up the merchant marine be regarded as satisfactory. Measures to protect French shipping, which disappeared to a large extent during the period of the movement to free trade, have been resorted to again since 1880, and have led to the payment of two to four million dollars a year to aid the building and renewing of French ships. They have done no more than keep the French fleet stationary while other merchant marines were rapidly advancing, and seem to have hurt rather than helped the interests of French commerce. It is noteworthy that of the total output of merchant ships in France in 1901, 70 per cent of the tonnage was in the form of sailing vessels, a means of transportation now out of date for most purposes of foreign commerce; and that two-fifths of the total tonnage under the French flag in 1912 were in the form of sailing ships.

QUESTIONS AND TOPICS

1. Burdens from which French commerce and industry were freed by the Revolution. [Review chap. 25, above; Rand, Ec. hist., chap. 3; Adams, Growth, chap. 15.]

2. Hayti as a French colony and as an independent state. [A. K. Fiske chap. 20 ff.; Spenser St. John, Hayti, Lond., 1884, chaps. 2, 3, 10.]

3. Backward political condition of France after 1815. [Adams, Growth, chap. 18; Seignobos, chap. 5.]

4. Write a report on one of the following topics in French commerce, about 1850: import and export trade, manufactures, customs tariff, colonial system. [Homans, Cyclopedia, p. 710 ff.].

5. France under Napoleon III. [Seignobos, chap. 6.]

6. The commercial treaty of 1860. [McCarthy, Hist., vol. 2, chap. 41; Morley, Cobden, chap. 32.]

7. What is the difference between "general" and "special" commerce? [Statesman's Year-Book, France, Commerce.]

8. France under the third republic. [Seignobos, chap. 7.]

9. The protectionist reaction. [Herbert A. L. Fisher, in Econ. Journal, 1896, 6: 341-355.]

10. The situation of France in international commerce. [Lebon, in International Monthly, 1901, 3: 252–273.]

CHAPTER XLII

MINOR STATES OF CENTRAL AND NORTHERN EUROPE

511. States of minor commercial importance. — In the year 1912 four great states carried on nearly one-half of the foreign commerce of the world, considerably more than one-half if their dependencies be counted with them. Three of these, England (including the British Empire), Germany, and France, have already formed the subject of study, and the fourth, the United States, will be considered at length in a later section. We must now attend to the commercial development in other countries, reviewing their history more briefly as accords with their minor importance. We shall take up first two countries, the Netherlands and Belgium, which stand not far below the leaders, and which would even rank high among them but for their small size. It may not be unnecessary to remind the reader that Belgium is a creation of the nineteenth century; the country had formed a province subject to Spain or Austria until the period of the French Revolution when it was for a time incorporated in France, then (1815) joined to the Netherlands in a single kingdom, and finally, in 1830, established as an independent state.

512. Commerce of the Netherlands to 1830. — Dutch commerce had long passed its best days when, toward the close of the eighteenth century, it received what seemed to be its death blow in the war with England, growing out of the American war of independence. Before the Netherlands had begun to recover from its reverses it was engulfed in the movements of the French Revolution; was conquered and heavily taxed by the French; suffered under the ban of Napoleon's continental system; and lost for a time its most valuable colonial possessions. At the close of the wars, in 1815, it recovered its colonies, except Ceylon, the Cape of Good Hope, and parts of Guiana, which remained in the possession of the English, but it could not recover its former commercial position. Other peoples had learned to do for themselves what the Netherlands had once done for them as a merchant and carrier; and Amsterdam and Rotterdam saw their commerce pass to London, Hamburg, and other ports. In striking contrast with the earlier period the Netherlands had in 1824–5 only 7 large ships under construction while England had about 800. The union with the Belgian provinces, lasting from 1815 to 1830, increased the area and the internal trade of the country, but was a hindrance rather than a help to the development of foreign commerce. The Belgian industries required protection, and the tariff, framed to meet both their demands and a protectionist sentiment in the Netherlands which had grown up in the period of decline, hampered free commercial relations with other states.

513. Dutch commerce since 1830. — The Netherlands, even after the separation of Belgium in 1830, clung to the protective tariff, and remained outside the great current of commerce. A colonial policy known as the culture-system, adopted in their East Indian possessions, especially Java, returned a large revenue to the government, but prevented commercial development there, while the West Indian possessions suffered severely from the lack of labor following the abolition of slavery. Meanwhile, however, a movement for free trade had grown up which resulted, after 1850, in a lowering of tariff rates until they were little more than nominal in amount. The growth of the European railway system gave to the Netherlands a new importance as a place of import for wares destined for central Europe; and the country profited largely by the growth, on either side, of the two great industrial powers, England and Germany. In the last half of the century the growth of the Dutch commerce has been rapid and nearly constant. The annual value of the total special trade (exports plus imports, in this case including the precious metals) was as follows at ten-year intervals from 1850 to 1910, in milliards of dollars: .1, .2, .2, .6, 1.0, 1.5, 2.4. Figures for the general trade of the country, including goods imported and then re-exported, would be considerably larger.

514. Position of the Dutch in recent commerce. — The Netherlands suffers from a lack of mineral resources, as the country is largely "made" land, composed of sand and silt which the great rivers have deposited at their entrance to the sea. The Dutch, therefore, have been handicapped in their attempts to share in the development of modern industry, and find in agriculture rather than in manufacturing their chief occupation. They have succeeded in certain special manufactures (diamond-cutting, chocolate, oleomargarine), in gaining a leading place, but cannot compete with other nations in the staple machine industries. They produce a surplus of dairy products for export, and import raw materials and manufactures which cannot be produced in sufficient quantity at home; but the striking feature of their trade is the fact that in general the same products appear among both the imports and the exports. The Dutch, favored by their national training and geographical position, and diverted from other means of livelihood by lack of resources, are the middlemen of Europe, arranging exchanges between other countries.

515. Belgium: early industrial development. — Belgium is far more richly endowed with mineral resources; in spite of its small area it produced in 1912 more than half as much coal as France, and has also rich supplies of ore of iron, and other metals. Even before the full value of these resources was realized Belgium was a distinctly industrial state, and for many centuries Flanders and other districts have been noted for their manufactures. Belgium did not suffer, therefore, as did the Netherlands, from the period of French occupation; it was freed by the French from many trammels on industry dating from the gild period, and it found in France a market for its manufactures which enabled it to endure the restrictions of the

Continental System. During the period of union with the Netherlands (1815–1830) Belgian industries continued to develop, with the aid of Dutch capital, commerce, and colonies; the districts represented by Ghent, Brussels, Charleroy, and Liege became widely known for the manufacture of textiles, iron wares, etc. Progress was checked for a time by the breach with the Netherlands (1830), but this was just the period when steam began to be applied to manufactures and to railroads, and with the aid of this new force Belgium quickly recovered her former position. The prosperity of Antwerp, the one important port of modern Belgium, was seriously threatened by the act of the Dutch in closing the Scheldt to navigation; but the Belgians were willing to pay for this means of access to the sea, and finally bought outright the privilege of using it.

516. Belgian commercial policy. — During the first decades of Belgian independence the tariff which had been inherited from the period of Dutch rule was made more strict, and before the middle of the century it had been changed so as to grant considerable protection to agriculture, industry, and the carrying trade. Belgium, however, like the Netherlands, is too small a country to be able to afford high protection. After 1850 a free-trade movement led to lower duties and to liberal commercial treaties, the policy which has since been followed in the main. Many influences were at work in this period to further commerce, chief among them the technical improvements in manufactures and transportation; so it is dangerous to argue that the prosperity of Belgium in the following period was due to the policy of greater freedom of trade. It is certain, however, that Belgian commerce could not have attained the development it did without this policy.

517. Survey of the recent development of Belgian commerce. — Giving figures roughly in millions of dollars, the total commerce rose in the protectionist period, 1840 to 1850, from 70 to 80. In the following ten years of transition it rose to 190; in 1880, after twenty years of nearly free trade, it had risen to 560, and in the decades since then the figures have been 600, 856 and 1480. To this commercial expansion the port of Antwerp owed its position as second only to Hamburg among the ports of the Continent. An analysis of the different items of which the recent trade of the Belgians was composed shows that their strong exporting industries were manufactures (yarns and textiles, iron, glass, etc.), while they were obliged to import a large part of their food supply, and of the raw materials for their industries.

518. Switzerland: obstacles to industrial development. — Another country, small in area but with a commerce exceeding that of many greater states, is Switzerland. With its agricultural capabilities restricted by the area covered by mountains, and with no important mineral resources, Switzerland has to depend upon the character of its people as its chief industrial asset. In the early part of the nineteenth century it suffered not only from the restrictive tariffs of the states surrounding it, but also from the fact that it had itself not become a political unit, and was cut into small pieces by dues and tolls on trade. The hindrances to internal trade were finally swept away in 1848, when Switzerland became a federal republic; and the people made use of their greater freedom at home and of the lowering of tariff rates abroad to extend their commerce rapidly.

519. Position of the Swiss in recent commerce. — Switzerland has developed almost entirely along the line of manufactures. The agricultural population has actually decreased since 1870, as it has become easier to purchase food products from abroad by the export of manufactured products: silk and cotton textiles, clocks and watches, etc. Swiss industries have not reached the development of those in more advanced countries, and much of the work is still done outside of factories, and with simple home machinery. These conditions imply hard work and low returns, but the Swiss must choose between securing in this way some share in the world's commerce, or starving in the vain attempt to support themselves by the scanty resources of their own country.

520. Austria-Hungary: survey of commercial development. — The state of Austria-Hungary, though it was in size the third in Europe, ranked only seventh in commerce in 1912, taking place after the Netherlands, Belgium, and Russia. Reference to an earlier chapter, describing conditions before 1800, will suggest that Austria-Hungary entered the nineteenth century handicapped by its economic and political conditions. It required roughly a full half of the century to remove the more serious obstacles to progress, and the latter half of the century has not given time enough to enable the people to win a place with their more advanced neighbors of the West of Europe.

521. Obstacles to the growth of commerce and industry. — Of the difficulties under which commerce labored the following are among the most important: (*a*) the character of the government, which was a personal absolutism like that in France before the French Revolution, absorbed by the family interests of the ruling house and by questions of foreign policy, and attending but slightly to the interests of the people as a whole; (*b*) the system of prohibitive tariffs, which was maintained more strictly than in any other state of central Europe; (*c*) the separation of different parts of Austria-Hungary by tolls and tariffs; (*d*) the slight development of manufacturing industry, due not to the lack of natural resources but to the backwardness of the people and to the persistence of restrictions dating from the period of the gilds.

522. Gradual removal of these obstacles. — (*a*) The revolution of 1848 began a movement for constitutional government, which led in time to the fall of absolutism and the introduction of modern representative assemblies. At the same time, however the spirit of nationalism was awakened among the various peoples, and their conflicting claims (especially in Hungary and in Bohemia) have seriously affected the working of the parliamentary system. (*b*) The prohibitive system, which had absolutely excluded the most important manufactures or had allowed them to be imported only as a special favor and by payment of high duties, was abandoned after 1848 for a more moderate system of protection, and commercial treaties with various states were made to facilitate the movement of wares. (*c*) The freedom of internal trade was secured for the Austrian half of the monarchy in 1826, and for the whole state (with slight exceptions) in 1851. (*d*) The restrictions on industry continued even after 1850. A man could not exercise any trade requiring the use of a machine, or any but the simplest household employments, without securing a public license; a man might exercise only one trade, and a cabinet-maker might not upholster the furniture he made, nor might a baker make confectionery. Most of these restrictions were abolished in 1860.

523. Growth of commerce since 1850. — Commerce and industry, which had developed with exceeding slowness before 1850, were quick to respond to the change in conditions, aided by the extension of the railroad system which marked this period. In spite of heavy taxes and a depreciated paper currency there was an extraordinary increase of energy and growth of business. Foreign trade more than doubled in twenty years, and each part of the monarchy developed along the line of its strongest resources; the Austrian lands, especially Bohemia, extended their mines and built up their backward manufactures, while the Hungarian lands exported increasing quantities of agricultural products (wheat, flour, stock, etc.). A reaction toward protection, felt since the '70's, did not check the growth of commerce; a more serious danger appeared to be the possibility that a tariff barrier would again be established between the two parts of the monarchy as the result of the national aspirations of the Hungarians.

524. Position of Austria-Hungary in recent commerce. — Austria-Hungary carried on by far the largest part of its commerce with its neighbor, Germany, and found the greatest hope of the future in building up the trade with the Balkan states, and along the route to Salonika and Constantinople. Hampered by its position, it has not succeeded, in spite of generous bounties, in developing its shipping trade to important proportions. The first ships to pass through the Suez canal in 1869 were three steamers of the Austrian Lloyd, but in 1913 less than one twentieth of the tonnage using the canal was Austrian. The two ports that served the monarchy, Triest for the Austrian part and Fiume for the Hungarian, were favored by every sort of assistance that the government could render, but remained still ports of the second class, surpassed in importance by a score of other ports in Europe.

525. The Scandinavian states; their position in recent commerce. — The Scandinavian states (Sweden, Norway, Denmark) held a lower rank among commercial countries than others which will be mentioned later, but in a geographical grouping they may be properly considered here; and their commerce was important, at least, in proportion to the irrelatively small population. These states were characterized, in general, by a lack of coal and by the slight development of manufactures; and by a soil and climate which are disadvantageous to the ordinary operations of agriculture. The difficulties of life have forced many inhabitants to emigrate, and forced those who stayed at home to make the most of their extractive industries (forestry, mining, dairying), the products of which they could exchange for the wares of more favored nations. The time when the Baltic trade was one of the great branches of world commerce was long past. The rest of Europe would have been but slightly affected if it had been separated from the Scandinavian countries, while such a separation would have entailed ruin on them.

526. Denmark. — The little state of Denmark, with a population of but slightly over two million, had taken advantage of modern commercial facilities to specialize in the dairy industry, in which it has been a leader and teacher of Europe. When we add to butter the pork products raised in connection with the dairies, and the eggs from Danish poultry yards, we have the articles which made up more than two thirds of the total value of the country's exports.

527. Norway; Norwegian shipping. — In Norway, also, a country so barren that far less than 1 per cent of its area is suited to cultivation by the plough, dairying has been an important industry; and the dairy and forest industries supplied most of the exports. The difficulties of life on land were so great that the people were forced to take to the sea; they gained one tenth of the national income from the fisheries, and had, in proportion to their numbers, more merchant shipping than any other people. In 1913 Norway ranked second in tonnage of sailing ships (after the United States), fourth in total tonnage (after Germany), and fourth in tonnage of steamers. The position of Norwegian shipping was even higher before the use of iron ships had become general, and when Norway could utilize its forest products in shipbuilding. Norway enjoyed the most brilliant period of its shipping in the generation following 1850, when it took the place of the United States as one of the great carrying nations of the world.

528. Sweden. — Sweden was somewhat more fortunate than the other Scandinavian countries in its agricultural resources, and during part of the century has been able to export a surplus of grain. It has been recently, like the others, reduced to importing the cereals, and found its chief strength in products of the forest, the pasture and the mine. From its rich iron deposits it contributed raw materials for maintaining the iron industry in other countries, especially England.

QUESTIONS AND TOPICS

A profitable exercise on each of the minor countries treated in this and in the following chapters is a study of the statistics of present-day commerce, and a reduction of these statistics to the form of a graphic chart. [Statesman's Year-Book.]

1. Experience of the chief Dutch colony during the Napoleonic wars. [Day, Dutch in Java, chap. 5.]
2. The culture system. [Same, chaps. 7, 8.]
3. Political and social conditions in the Netherlands. [Hough, Dutch life, N. Y., 1901; Campen in Westminster Review, 1890, 134: 479–492; National Review, 1890, 15: 748–763.]

4. Recent political history of Belgium. [Seignobos, chap. 8.]

5. Recent history of the Swiss. [Seignobos, chap. 9.]

6. Labor conditions in Switzerland. [Scaife in Forum, 1901, 31: 30-46.]

7. Conditions in Austria-Hungary in the period of the absolute monarchy. [Seignobos, chap. 13.]

8. Political development of Austria-Hungary in the last half of the century. [Same, chap. 17.]

9. Austria-Hungary's colonial experiment. (Bosnia-Herzegovina.) [Monthly Review, 1902, 8: 72 ff.]

10. Recent commercial policy. [Philippovich in Economic Journal, 1902, 12: 177–181.]

11. The conflict of nationalities. [Edinburgh Review, 1898, 188; 1–36; Quarterly Review, 1901, 194: 372-395, with map; Coubertin in Fortnightly Review, 1901, 76: 605–614.]

12. Recent history of the Scandinavian states. [Seignobos, chap. 18.]

13. Danish agriculture. [Westenholz in Monthly Review, 1904, 14: Feb., 69–77; Givskor in Economic Rev., 1902, 12: 410–419.]

14. Modern Iceland. [Quarterly Review, 1894, 179: 58-82; Statesman's Year Book.]

15. The Danish West Indies. [Waldemar Westergaard, The Danish West Indies, N. Y., 1917.]

BIBLIOGRAPHY

The narrative history of the minor states is well treated in Seignobos; present conditions are described in volumes of the series Our European Neighbors, N. Y., Putnam.

On Belgium, see Belgium, its institutions, industries, and commerce, Brussels, 1904, a handbook published by the government for the Louisiana Purchase Exposition. Similar handbooks have been published for the Scandinavian peninsula; they include much historical material and are valuable sources for our purposes. See Norway, edited by Sten Konow and Karl Fischer, Kristiania, 1900; Sweden, its people and its industry, edited by Gustav Sundbärg, Stockholm, 1904. Drachmann, Industrial development and commercial policies of the three Scandinavian countries, published for the Carnegie Peace Endowment in 1915, is the best survey of commercial development, but is not an easy book for the elementary student to use. Kiaer has published a valuable historical sketch of the development of Scandinavian shipping in Journal of Polit. Econ., 1891–2, 1: 329–364.

On Switzerland see The Swiss Confederation, by Francis O. Adams and C. D. Cunningham, London, 1889, and W. H. Dawson, Social Switzerland, London, 1897. On Austria-Hungary see S. Whitman, The realm of the Habsburgs, N.Y., Lovell [1893], and the volume by F. H. E. Palmer in the series of Our European Neighbors, N. Y., Putnam.

CHAPTER XLIII

STATES OF SOUTHERN EUROPE

529. Condition of Italy in the first half of the century. — Of the countries of southern Europe none has gained so rapidly as Italy in the latter part of the nineteenth century. The explanation, however, must be sought largely in the fact that none was sunk so low as Italy in the first part of the century. Conditions of an earlier period, described in the previous chapter on Italy, lasted far into recent times. Here is the description given by an English author, writing in 1878: "Before 1848, Italy, all except Piedmont, seemed hopelessly crushed. Austria, the Pope, and the Bourbons held her in their grasp. Even the comparatively native sovereigns of Tuscany had turned oppressor, and all Italy groaned like a man in the grasp of the torturer. Commerce languished, divergent fiscal laws and arbitrary raids on private wealth choked up the channels of intercourse between one part of the kingdom and another; without shipping, without manufactures or foreign trade of a solid kind, possessed of no political security, Italy was, thirty years ago, more insignificant in the eyes of neighboring nations than Greece or Spain is now." In southern Italy the government was incompetent to perform the first of its public duties, the protection of its citizens. It could not withstand even the half-civilized corsairs of Tripoli, who pillaged the Neapolitan ships, and finally, long after the United States had shown the proper way to deal with such pirates, bought from them a disgraceful peace.

530. Lack of political and commercial union. — The peninsula was divided among seven independent states, so stratified as to cut the natural lines of trade, and to prevent effectually the development of any national commercial life. Of these states six had the protective tariffs characteristic of the prohibitive period, and toll stations existed even inside the frontiers. A Milan manufacturer, shipping silks to Florence (about 1840), had to pass eight customs stations in 150 miles; a merchant on his way from Bologna to Lucca was stopped at seven stations in the stretch of about 125 miles. Commerce would have been in desperate straits except that all but two of the states touched the sea, and hence could find some opening for trade. It is noteworthy, however, that the leading commercial city of Italy in this period was one which many people now would be puzzled to place on the map, Leghorn. It owed its commercial importance, not to the advantages of situation or to the productive resources of surrounding territory; it stood, about 1900, sixth in the list of Italian ports, and had but a fraction of the trade going to Naples or Genoa. It gained its prosperity at this time simply by "the comparative security and freedom" which foreigners found there, and which they were denied in other parts of Italy.

531. Establishment of Italian unity. — The example of Germany, in extricating herself from a somewhat similar situation by the formation of customs unions, made, naturally, an impression in Italy, and led in 1847 to an attempt there to form a similar union. The attempt was paralyzed by the opposition of Austria, who saw in it a blow aimed at her political influence in the peninsula. The Italian states, unlike the German, could secure commercial union only as a result of national unity, not as a means of preparation for it. National unity was in preparation, nevertheless, in the brain of a great statesman, Cavour, and was obtained through his far-sighted plans and the cooperation of the king whom he served, Victor Emanuel, ruler of Piedmont, In the few years following 1859 a real kingdom of Italy was established, and the country, which for nearly fifteen hundred years had formed the prey of rival powers, became at last a power herself, worthy to rank with the other great states of Europe. The old barriers to internal trade disappeared, and the whole country accepted the customs tariff of Piedmont, which was extremely liberal. Rarely, if ever, in the history of commerce, have changes of such sweeping importance taken place so quickly. The tariff of the Kingdom of the Two Sicilies, to choose an extreme example, which levied a duty of over $2,500 on a centner of silk goods, gave place to a tariff of United Italy, in which the corresponding duty reached a minimum of $10.

532. Survey of Italian commerce since 1860. — The effect on commerce of this great political upheaval was instantaneous. Contrasting the two years, 1859 and 1861, we find that in this brief interval the value of imports into Italy more than doubled. It will be convenient to insert here figures giving the total value (exports plus imports) of the special trade of Italy, at ten year intervals from 1860 to 1910. Reduced to dollars and given in round figures of millions they are as follows: 130, 320, 440, 440, 590, 1,020. The reader will note that trade grew at a rapid rate from 1860 to 1870, and more slowly to 1880. Then came a stoppage; in some years there was an actual decline, and the value of exports was considerably less at the end of the decade than at its beginning. There was a recovery in the ten years closing in 1900, and a rapid advance thereafter. The figures show, however, that Italian commerce advanced but slowly in the latter part of the century, and a study of conditions at its close would show that Italy had a commerce then far from commensurate with the country's large population. The average share of each Italian in the annual movement of commerce was much less than that falling to the inhabitants of most of the other states of Europe. Among the great states only Spain and Russia ranked lower, in this respect.

This survey suggests the topics which demand discussion in the following sections. We must know the reasons for the rapid development of Italian commerce till about 1880, and for the check to progress after that date; we want an explanation of the comparatively slight share which the average Italian has had in the world's commerce.

533. Development of agriculture and commerce after 1860. — When Italy secured national unity, about 1860, the country was almost purely agricultural. The ordinary trades, of course, were exercised to satisfy local needs, and the silk manufacture had not altogether perished, but, to use the phrase of a modern writer, though there were industries in Italy there was no Italian industry. Restrictive taxes and tariffs had prevented the development of any considerable manufacture. When, therefore, comparative freedom of trade was introduced, the people made full use of the opportunity to purchase the cheap wares of the factory industry of other countries; they imported manufactures in increasing amount, and paid for them by exporting their surplus agricultural products. The railroad system, which grew from 800 to 5,000 miles in the period 1860–1880, gave greatly improved facilities for the marketing of wares, and affected distinctly the course of foreign trade; the proportion of commerce carried on across the land frontier rose in this period from a third to nearly a half of the total.

534. Increase of customs duties; protection; tariff war. — The Italians realized at once the benefits of the movement which led to national unity, but ever since they have been carrying its burdens. The expense of the national movement was enormous, especially in view of the poverty of the country; it weighted the government with debt, and required a constant increase in taxes. The treasury, reaching out in every direction for money, and forced to some fiscal devices which seem now positively iniquitous, did not spare commerce. Duties were raised from time to time, and a general revision of the tariff in 1878, while it reformed some old abuses, tended still to raise the general level of duties, and introduced a distinct element of protection. The revised tariff, however, did not go far enough to satisfy the demands either of the treasury or of the protectionists, and was altered again in 1887. Commerce labored henceforth under high revenue duties, under increased duties designed to protect Italian manufactures, and, furthermore, under new or increased duties on agricultural products.

One disastrous result of the new tariff appeared quickly in the outbreak of a tariff war between Italy and France. France had been Italy's best customer, taking at one time nearly half of her total exports and furnishing about a quarter of her imports. Trouble between the two countries had, however, been brewing for years; they were following different lines in foreign politics, and the protectionists on both sides of the frontier viewed with jealousy a commerce which stimulated the development of international rather than national industries. The tariff of 1887 called forth a reply in kind from France; this was met by a rejoinder from Italy; and so the duties grew rapidly on either side, and had soon reduced the commerce between the countries to a small part of its former dimensions. The most important export industries of Italy (wine, raw silk, fruits, live stock, eggs) suffered severely, and many producers were absolutely ruined.

535. Italian agriculture; poverty of the people. — The course of tariff policy explains, in large part, the check which Italian commerce had experienced in the last decades of the century. Reasons why this commerce was so small in proportion to the population will appear as we review now some features of the Italian productive organization.

Few of the large states of Europe showed so large a proportion of the people engaged in agriculture, so small a proportion in manufactures, as were found in modern Italy. Considerably more than half the people lived directly from the land. Not only did Italy show backwardness in this respect; the character of Italian agriculture was itself backward. The land was worked largely "on shares," a system which does not encourage improvement or stimulate efficiency. A government commission reported in 1881 that production depended almost entirely on mere labor, and that capital and intelligence contributed only a minimum. Antiquated implements and wasteful and careless methods of treating the crop, went far to nullify the natural advantages of soil and climate. When we consider that, of the small surplus which the agriculturist obtained, the government demanded a good share for taxes, we can understand why the mass of the people were wretchedly poor, and must content themselves with a bare living. It is worth noting that about 1900 the consumption of sugar in Italy was only about six pounds per head, less, even, than in Turkey, while in most European countries people consumed from 20 to 50 pounds or even more. Salt itself was a luxury, which was heavily taxed. The protective tariff appeared to extend favors to farmers as well as to manufacturers, but the people who gained by it were chiefly the great landlords, while the mass of the people simply paid more for bread because of it.

536. Manufactures. — As agriculture was the strongest branch of production in Italy, it was bound to suffer more than any other from the protective tariff. Italian agriculturists did not need protection for most of their products, and they did need the chance to market their products in free exchange for industrial wares imported from abroad. We have now to see what success the Italian tariff had in building up the native industry on which the people were forced, in large part, to rely.

Italian manufactures, in 1880, had scarcely advanced beyond the meager beginnings which we found in 1860. Nearly all conditions were adverse. Capital was scanty. Of important raw materials the country lacked all but silk and hemp. Coal, the mainstay of modern manufacturing, had to be imported at an expense which nearly doubled its price. Most serious, perhaps, of all difficulties was the lack of a class of industrial leaders, men of technical knowledge and business energy. We may take as typical the case of a macaroni manufacturer in Naples, who declined some important foreign orders, for no other reason than that he had, as it was, enough business to make both ends meet, and saw no reason for adding a new worry to life. The single important advantage which Italian manufacturers enjoyed was that of cheap labor. The government was lax in its factory legislation, and allowed employers to secure their labor supply from women and children, at an extremely low rate.

The great development, therefore, which Italian manufacturers have shown in the last decades of the century has been due not to any natural fitness of the country, but solely to the tariff, which has raised prices paid by consumers enough to counterbalance natural disadvantages, and to attract men into manufacturing industry. The artificial character of Italian manufactures is shown strikingly by the fact that at the very close of the century not one of the protected manufactures was strong enough to contribute in any considerable degree to the exports of the country.

537. Shipping; colonies. — Some of the most unfortunate features of Italian policy seem to have been the result of national vanity, of the desire on the part of Italians, now that they had made for themselves a great state, to make their state resemble the other great powers in all respects. This feeling was certainly responsible in part for their determination to build up a system of national manufactures, regardless of expense. It led them to profuse expenditures for the encouragement of shipping, which resulted, indeed, in a growth of the merchant marine, but created in it merely a costly luxury. The Italian navigation companies charged high freight rates, and included in their fleets many antiquated vessels.

The instinct of imitation, finally, led the Italians to follow the lead of other powers in colonial expansion. They did not escape the colonial fever prevalent in the eighties, and spent money and lives lavishly, in the attempt to build up a dominion on the African side of the Red Sea. Their attempt ended in disastrous failure (Adowa, 1896), and popular opposition to such enterprises grew so strong that the government did not dare to carry out a later project for the establishment of an Italian station on the coast of China (San Mun, 1899).

538. Recent progress of Italy. — The preceding sections have been avowedly critical in tone, and are designed to make clear the great gap which separates Italy from the leaders in the world's industry and commerce. It is important, however, that the reader should distinguish Italy, on the other side, from such backward countries as Spain and Portugal. Though Italy was poor it was not so poor as they, and it offered vastly richer promises for the future. In the closing years of the century it showed marked advances in many lines. Italian agriculturists awakened to the possibilities of their profession; they showed an eagerness to improve their methods, and by various forms of association and cooperation they scored great advances. The exports of dairy and poultry products doubled in about ten years, and became more important than the export of wine. Italian manufacturers secured now from natives the technical assistance for which they formerly depended entirely on foreigners. They emancipated themselves, in part, from coal, by their skilful management of water power, and have come to enjoy a high reputation for electrical appliances for the transmission of power and other purposes. The tariff has been made more liberal by treaties with other states and by a reconciliation with France; and commerce in the period before 1914 gave evidence of the capacity for healthy growth.

539. Spain. — Spain, with an area much larger than that of Italy, and with a population more than half as large, had in 1912 a commerce less than half that of the Italian. The fault lay not with the country, which in mineral resources is perhaps the richest in Europe, and which under the skilful agriculture of the Moors was made to bloom like a garden, but with the people who have neglected or misused their opportunities. Spain furnishes a striking example of the evil that bad politics can work in economic development. The personal absolutism of the period before 1800 has been shaken off in the nineteenth century, but experiments in constitutional government under monarchs of various families and even under a republic, have not succeeded in bettering conditions greatly. The mass of the people remained ignorant, and most of their leaders were inefficient and corrupt. There can be no wholesome economic life under these conditions. Shrewd politicians used economic enterprises merely as a means to draw money from the public treasury or from the pockets of consumers, while the investor or worker without political influence was deterred from enterprise by the heavy taxes which were heaped upon him.

540. Spanish commerce in the first half of the century. — A partial reform of the Spanish colonial system toward the close of the eighteenth century led to a growth of trade with the colonies, so that it formed, if the figures can be trusted, a considerable part of the total Spanish commerce, which was small at best. The promise of commercial development inside the Spanish Empire was of short duration. While Spain was still harassed by the Napoleonic wars, revolutions began among the Spanish colonies on the American continent; and as soon as they had achieved their independence they used it to trade with states like England rather than with the country which had asked so much of them and could offer them so little. The commerce of Spain with other countries was hampered by the Spanish commercial policy, which an Englishman of the time called "one of the most pernicious and restrictive of all the systems of trading exclusion." Duties were levied both on imports and on exports, and included not only rates of 50 to 100 per cent but also many absolute prohibitions. Spanish commerce would have been starved out of existence if the government which set these rules had not, by its inefficiency and corruption, furnished the means of evading them. A veritable army, including, it is said, 300,000 persons, of whom one third were armed, found its chief occupation in smuggling; Spanish manufacturers maintained factories only to mask the sale of contraband goods, and even members of the government engaged in the contraband trade.

541. Recent commerce of Spain. — The turning-point in the recent history of Spanish commerce came about the middle of the century, when the worst abuses of the old tariff were shorn off. The reform was followed by a rapid increase in the country's trade, which grew to more than fourfold in the forty years following. Especially noteworthy was the increase in this period of the importation of the implements and raw materials of industry (coal, machinery, textile fibers, etc.), showing that Spain was at last beginning to seek a place for herself among modern commercial nations. Such indications of progress must not, however, blind our eyes to the fact that it was attained by a colonial and commercial policy which retained many of the old restrictive features. The loss of the remaining important colonies to the United States in the war of 1898 was a severe blow to Spanish industries, and they have been supported since then by a protective tariff which bore heavily on many producers as well as on all the consumers in Spain. The considerable development in mining (iron, copper, quicksilver, etc.) has been due to foreign energy and capital, and the native Spaniards offered as exports to other countries little more than dessert for their dinner tables: wine, fruit, nuts, and raisins. It is noteworthy and significant that Spain suffered seriously from the competition of California in the sale of fruit in Europe; this most perishable of wares, in which a nearby country ought to control the market without effort, was packed and transported in such a slovenly fashion by the Spaniards that a people 6,000 miles distant could excel them in the quality they offered to the consumer in Paris or London. In the period from 1890 to 1910 the figures showing the value of Spanish commerce remained almost stationary.

542. Portugal. — In all the respects which concern a student of recent commerce Portugal is but a miniature of Spain, with the faults of Spain exaggerated rather than lessened by the weakness and smaller size of the country. "It is scarcely credible, but it is nevertheless a fact, that agriculture is nearly in the same condition as it was some hundreds of years since"; these words of an English author would apply now nearly as well as when they were written in 1843. Few of the inhabitants were engaged in occupations other than agriculture; rich mines remained unworked, and manufacturing has remained insignificant throughout the century. After 1850 it could still be said of the Portuguese that "their entire faith is reposed in protectionism, monopolies, restrictions, and high duties." Portuguese trade, nearly ruined already, received a further blow by the separation of Brazil about 1820; and though considerable colonial possessions in Africa and the East were retained, the Portuguese have shown no capacity to base on them commerce of any importance. By exports, of which wine and cork were the most important, the Portuguese were able to satisfy their most pressing necessities; but the backwardness of commerce can be seen when it is realized that the trade of this country, approximately equal in population to the Netherlands, was in 1911 less than one twentieth of Dutch trade.

QUESTIONS AND TOPICS

1. Social and economic conditions in Italy after 1800. [King, Hist., vol. 1, chaps. 3–5.]
2. Formation of United Italy. [Seignobos, chap. 11, middle part.]
3. Commerce of Italy about 1850. [Homans, Cyclopedia, p. 1114 ff.]
4. Burden of debt and taxes. [King and Okey, p. 270 ff., chap. 15; Villari, chap. 4; W. Calkins, Taxation and business in Italy, Forum, 1902, 33: 333–345.]
5. Italian agriculture. [King and Okey, chap. 8; Villari, chap. 11.]
6. Life of the agricultural classes. [Phillipps, Peasants of Romagna, Fortnightly Review, 1897, 68: 407–417.]
7. Poverty of the people. [King and Okey, chap. 6; Villari, chap. 4; Strutt, Monthly Review, 1901, 4: August, 62 ff.]
8. Emigration. [King and Okey, chap. 17; Schuyler, Italian immigration into the United States, Polit. Science Quarterly, 1889, 4: 480–495.]
9. Italian manufactures. [King and Okey, chap. 7: Villari, chap. 12.]
10. The Italian colonial venture. [Edwards in Westminister Review, 1897, 148: 477–489; Keller, 517–531.]
11. Recent commerce of Italy. [Statesman's Year-Book; treat exports, imports, countries traded with, etc., as has been already suggested.]
12. Commerce of Italy with the United States. [Luzzatti, in North Amer. Review, 1903, 177: 247–259.]

13. Recent development of agriculture. [King and Okey, chap. 9.]

14. Political conditions in Spain. [Dillon in Contemporary Review, 1898, 73: 876–907, 74: 305–334; Foreman in National Review, 1897, 29: 721–734, 30: 547–560.]

15. Commerce of Spain about 1850. [Homans, Cyclopedia, p. 1739 ff.]

16. The recent commerce of Spain. [Statesman's Year-Book.]

17. Resources and industries of Spain. [E. D. Jones in North Amer. Review, 1898, 167: 39–47.]

18. Recent commerce of Portugal. [Statesman's Year-Book; see Homans, Cyclopedia, for conditions about 1850.]

BIBLIOGRAPHY

For the general history of Italy, see besides Seignobos, Bolton King, History of Italian unity, N. Y., Scribner, 1899, 2 vols., with bibliography. The book by the same author in collaboration with Thomas Okey, ** Italy to-day, London (N. Y., Scribner), 1901, is excellent for recent conditions, and has a full classified bibliography. Villari, * Italian life, N. Y., Putnam, 1902, is more popular and depends in part on King and Okey, but still is good. Orsi's book in Story of the Nations Series is mainly political.

On Spain good reading in English is as scarce as on Italy it is plentiful. Seignobos is dull, and Hume's histories are almost entirely political. There is, however, a good book in the series of British Colonies and Foreign Countries, W. Webster, * Spain, London, 1882; and Higgin, Spanish life, N. Y., Putnam, 1902, has some material of value. The U. S. Monthly Summary, Commerce and Finance, published several reviews of Spanish commerce at the time of the Spanish war (March, June, 1898, April, 1899), and a considerable amount of material on various aspects of Spain appeared about that time in the periodicals.

The close commercial relations between Portugal and England have given rise to two excellent books on the condition of Portugal in the nineteenth century, J. J. Forrester, * Portugal and its capabilities, third ed., London, 1856; Oswald Crawfurd, * Portugal, old and new, London, 1880.

CHAPTER XLIV

EASTERN EUROPE

543. Great size and small commerce of the Russian Empire — The attention and imagination of men have long been impressed by the size of the Russian empire, which included an area greater than that presented by the moon at the full. Combining the characteristics both of Europe and of Asia, Russia was almost a world in herself, and, indeed, was called by one of her rulers "a sixth part of the world," worthy to rank as a continent. Yet this great state took a place in modern commerce below petty countries like the Netherlands and Belgium. A country of such vast size might, of course, secure by internal trade many of the advantages which smaller countries must seek in international exchange. The United States presents an example of a territory so large and so richly endowed that it can afford, in considerable degree, to renounce commerce with the rest of the world, and can still maintain from its own resources a high industrial civilization. Russia has not enjoyed a similar success. It had a comparatively sluggish internal trade; and it lacked industrial civilization. We must seek in the history of commerce an explanation of these facts.

544. Historical reasons for backward development. — The few paragraphs devoted to Russia in a previous chapter suggested the main reason for the country's backwardness. During many centuries, while the peoples of the West were advancing in civilization, the people of Russia were facing away from Europe, occupied in defending themselves against Asiatic princes. Russia shared in none of the great movements of early European history: feudalism, chivalry, crusades, rise of towns, Reformation, Renaissance. It was devoted entirely to the struggle for self-preservation. When it became part of the European world, therefore, about 1700, it brought with it into modern times many characteristics of an unformed, half-developed organization; and since that date it has been trying, and it is now still trying, to catch up with the rest of Europe.

545. Russian commerce about 1800. — The movement toward progress, initiated by Peter the Great about 1700, continued, with various fluctuations, during the century. In so far as it found expression in commerce we can regard the last fifty years before 1800 as a time of rapid advance; commerce grew to nine fold the volume which it showed in 1750. So slight, however, had been the beginnings of Russian trade, that it amounted in 1802 only to about fifty million dollars.

Russia was still practically in the position which it had occupied in the time of the Hansa, dependent on the West for all its finer manufactures, and supplying raw materials in exchange. Hemp and flax, crops which rapidly exhaust the soil, and for the cultivation of which the great tracts of fresh land in Russia offered an advantage, were the chief exports, Among others on the list were wood, grain, tallow, hides, furs, feathers, etc. The Russian nobles exported a certain amount of linen, which they forced their serfs to make for them that they might have the means of purchasing foreign luxuries, and manufactured also iron for sale abroad. The appearance among the exports of this metal, which we are used to associate with advanced industrial countries, is explained by the fact that charcoal was still an important source of fuel for the iron manufacture, and of this the boundless Russian forests offered an abundant supply.

546. Means of transportation. — Almost nothing had been done as yet to unite by means of transportation the vast stretches of territory in Russia. Roads were practically non-existent, and goods were transported by land only in winter, when they could be sledged over the rough ground on the snow. The water-ways, with which the country is so abundantly provided, had been connected by a few important canals, and were the chief means of transportation. Goods were brought to them on sledges in winter, to await the high water of the spring freshets. They were laden on flat-boats, holding sometimes several hundred tons, but built to draw only two or three feet of water, and were floated down with the current when the ice melted. The boats were rudely constructed, and were broken up for timber or fire-wood at the end of the trip. The inconvenience and uncertainty of such a system of transportation are obvious, but it was, nevertheless, remarkably cheap; rates on some water routes were only one or two cents per ton-mile.

547. Chief ports. — The conditions of transportation confined almost all the foreign trade of Russia to the sea, and the commerce across the western frontier was insignificant. Archangel, situated on the river Dwina, a few miles from the coast of the White Sea, and the leading port of Russia before the time of Peter the Great, still retained a respectable share of commerce, and was visited every year by ships from England and the Netherlands. In relative importance, however, it had declined greatly after the foundation of St. Petersburg, which soon became the most important outlet for the country's trade. A rival was at this time, however, growing up in the South, where Russia had only recently secured the territory on the shore of the Black Sea. Odessa, which was founded in 1793, rose rapidly in commercial importance, especially during the Napoleonic wars, when the Baltic trade suffered a severe check.

548. Development up to the Crimean War (1854–1856). — During the first half of the nineteenth century Russian commerce grew steadily but slowly; the rate of increase was much behind that of the preceding fifty years. A partial explanation of this check to progress can be found in the adoption, in 1822, of a prohibitive tariff; the importation of many foreign manufactures (clocks, textiles, porcelain, glassware, etc.), was absolutely forbidden. Shortly after the middle of the century, however, came a turning-point. The Crimean War, in which England and other states were engaged with Russia, is generally admitted to have yielded to neither of the chief combatants advantages proportional to the costs which it involved. It was in one way, however, of immense benefit to Russia. It awakened the country to a realization of its backwardness. It raised a demand for reform of antiquated conditions in economic and political life, which the Czar himself was the first to heed.

549. Reforms; growth of the railroad system. — The reform movement bore fruit in many lines to which we can pay but scant attention. It led to the emancipation of the serfs in 1861, by which a considerable part of the Russian people were liberated from a condition resembling medieval bondage, and became free land-holders. It secured at least a partial improvement in the system of government. It was, finally, to name the result of the greatest influence on commerce, the occasion for the introduction of the modern railroad system in Russia. The government had found itself so hampered in carrying on the war by the lack of transportation facilities, that it now bent every energy to remedying the defects. The railroads of Russia measured at the outbreak of the war only about 600 miles. In the ten years following the railroad system grew to over 2,000 miles, and in the next decade to about 10,000. Though the first lines were built mainly to serve military purposes, those constructed later were designed to develop the economic resources of the country; and it is hard to overestimate the importance of this development of the means of modern transportation, to a country which stood in such sore need of it as Russia.

550. Development of commerce. — The results of the reforms can be followed in the growth of Russian commerce after the middle of the century. In the decade 1860–1870 the foreign commerce of the country increased to more than double what it had been, and was growing at this time faster than the commerce of any other country in Europe, except that of a neighboring state, Austria-Hungary. Some significant changes, moreover, appeared in the direction and character of Russian trade. The great gains of the period were made by southern Russia, where the wheat fields of the rich "black-earth" district were brought within reach of a market. It was about this time that wheat won the first place among the exports away from flax and its products. Commerce by way of the Black Sea increased very rapidly, while the Baltic did not keep its proportional share in the commerce of the country, and the proportion of trade finding its outlet by the Arctic Ocean had sunk to insignificance. Commerce with the west of Europe across the land frontier, which formerly had been restricted by the difficulty of transportation, grew even faster than the Black Sea commerce, and gave an entirely new importance to trade relations with neighboring states. England had enjoyed the largest share of Russia's commerce during the first part of the century, but could not hold her own henceforth in competition with Germany. This last-named country, then in course of rapid industrial development, was enabled by the railroads to win her way rapidly in Russian commerce, and soon was the largest sharer in it.

551. Character of industries and commerce. — Russia, like many other of the European states, enjoyed the greatest freedom of trade in the period following closely after the middle of the century. The customs duties levied in Russia at this time would have been considered high in western Europe, but they were much lower than the rates ruling in the first half of the century, and much lower than the rates in force at the century's close.

Russia at this time was still almost exclusively agricultural. The serfs had learned to supply their simple needs for clothing and implements by domestic industries, but nothing like the western factory organization, with its extensive use of power machinery, had as yet appeared. Attempts to stimulate such an organization, by privileges and protection, had resulted in failure. The Russians are not a people with a gift for mechanism. It has been said of them that their only invention is the samovar, their apparatus for making tea. The world exposition of 1867 displayed samples of Russian industry, but most of these were the products of village craftsmen, and the few samples of modern manufacture came from factories owned for the most part by Germans. The exports of the country were still almost entirely raw products, and the manufactured wares which the country contributed to the commerce of the world were of the most simple description: yarn of flax and hemp, cordage, string, and sacking.

552. Recent history of the tariff. — In spite of these conditions the government pursued since about 1870 a policy of protection, which grew constantly more strict with the passage of time, and which furnished at the end of the century the most extreme example of protection to be found among civilized states. Comparing the tariff of 1868, which was comparatively liberal, with the tariff of 1891, we find that duties on some important manufactures rose in the following measure: on cotton goods and glassware, to double; on rails and locomotives to quadruple or more. Even more striking and more serious was the increase on partly manufactured wares. Duties rose on leather and yarns to twofold or more; on petroleum and wrought iron to threefold; on sulphuric acid to four or seven fold; on cast iron to tenfold. This is the period in which Germany was seeking commercial advantage by bargaining in tariff rates with other countries, and in which occurred the tariff war with Germany that has been noted above. At this time and again later Germany was able to bring her eastern neighbor to terms by financial pressure; Russia was a great borrower and needed the support of the Berlin money market. Russia raised still more, however, the rates of the tariff in a revision in 1903, and even after these had been reduced by treaty bargains they left the general level higher than before.

553. Development and cost of manufactures. — The protectionist policy in Russia gained its object, an increase in the manufacturing industry of the country. The product of home manufactures rose greatly in value, and the importation of foreign manufactures declined in proportion. This object, however, was attained at a great cost. Russia was even less suited to the modern system of manufactures than Italy or other states which we have considered. It lacked capital, technical knowledge, leaders, laborers of steadiness and intelligence — practically everything except raw materials, which were present in abundance. Manufactures, therefore, were conducted at an expense far above that common in other countries, and could be maintained only by forcing the people to pay far higher prices for their wares. A person could not get so much as a sewing needle without contributing an extra sum to the support of the home manufactures. The policy was the more questionable, as the profits of these manufactures went in large part to foreign stock holders, who utilized an opportunity for which the native Russians were still unprepared. Even from the political standpoint the policy of protection in Russia was attended with danger; many events indicated that the factory laborers would be the first to turn against the autocracy which had brought them into being.

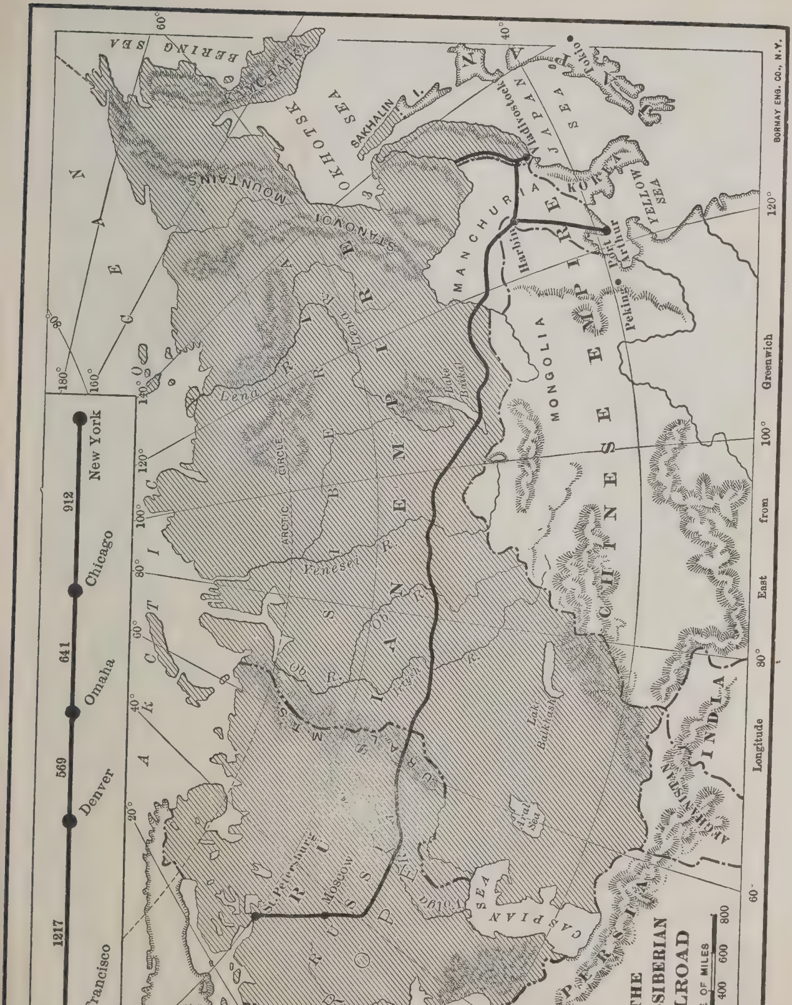
554. Effect of the tariff on agriculture. — The most serious aspect, however, of the Russian tariff was its effect upon agriculture. The great plains of the country were peculiarly adapted to the use of modern cultivating and harvesting machinery, such as contributed so much to the progress of agriculture in America. The tariff made such machinery so costly, whether it were imported or manufactured in Russia, that it was introduced to only a slight extent. A Russian estimated that the farmers of the United States found it profitable to spend nearly twenty times as much for agricultural implements and machinery as the Russians. The peasants could not afford even plows, harrows, or scythes of a modern type, and still used antiquated makeshifts. The mass of the people, at best, were ignorant and bound by custom, showing still the bad effects of the servile condition from which they had so recently emerged; and needed every encouragement to be induced to advance to better methods of cultivation. Even artificial fertilizers, however (superphosphates, etc.), were burdened with a duty, because there seemed a chance to manufacture them in the country; the result, naturally, was an increase in price, and a restriction in the use of this important aid to production.

555. Effect on railroads. — We must note further the effect of the tariff on the railroad system. Russia has never gone through the period of transportation by highroads. It passed from conditions described above as existing during the first part of the century, to the use of the railroad, without the transition such as was marked by the use of turnpikes in England. Even in 1914 the highroads of the country were of the crudest character, and internal trade depended mainly upon the waterways and railroads, contributing nearly the same tonnage to each. The railroads, therefore, had peculiarly important functions to perform in Russia. They served agriculture, moreover, to an unusual degree; the cereals supplied in 1897 more tonnage than any other ware carried on Russian railroads. Yet if we measure the development of railroads by comparing their length with the area or population of the country, we find that even at the close of the century the Russians had made but a beginning, and took the lowest rank among all important peoples. Taking merely Russia in Europe, and contrasting it with the United States, a country which also has a vast area and great vacant spaces, the Russian railway system in 1913 had not reached one ninth the development of the American in comparison with population, not one tenth in comparison with area. An important reason for this backwardness was the increased expense of the construction, equipment, and operation of railroads due to the high tariff on railroad supplies. Iron may be said, roughly, to cost double or more of what it cost in other countries. The government has not always been blind to these facts, and has made concessions from time to time, but the general tendency of its policy has been made only more glaring by these occasional exceptions.

556. Commercial reasons for Russia's eastern movement. — Preceding sections have sketched some of the historical influences which prevented Russia from taking a part in world-commerce commensurate with the space she covered on the map. This great state, which in the sixties took only sixth place in commerce among European countries, rose above Belgium and the Netherlands in the early part of the seventies, and secured fourth place, only to be passed again by these little states and for a time even by Austria-Hungary. In 1912 Russia still ranked sixth among European countries, eighth among all countries of the world, in the value of foreign trade.

This decline in commercial importance was due largely to the conscious and voluntary action of the government, which restricted commerce between its people and the people of the West. No government, however, regards all commerce as injurious, and the Russian government endeavored to atone for losses in the West by expansion in the East. In that direction Russia met people who were her industrial inferiors. By trade with them she hoped to secure imports which would not compete with her own products, and sought to win a market for her newly founded factories. The manufactured products which were too high in price to compete in European markets could be sold in the East so long as the cheaper wares of western Europe did not reach the field. As commerce extended, however, in the last decades of the century, Russia saw that her eastern markets were threatened unless she could apply to them the same policy of protection which she had established in the West; and the government was forced into the policy of military and political expansion, designed to close the doors of eastern markets to other powers, which received its check in the the war with Japan.

557. Course of the Asiatic trade. — In no period of the nineteenth century has Russian commerce across her Asiatic frontier formed any important fraction of her total foreign



THE TRANS-SIBERIAN RAILROAD

trade. At the beginning and end of the century it was about one tenth of the total; in the intervening time it was rather less. The difficulty of transportation over the great stretches of almost trackless territory confined the trade with the Far East to objects comprising great value in small bulk (tea, cloth, etc.), and directed Russian commerce rather to the Asiatic countries on her southeastern frontier (Persia, etc.). In the second half of the century, for reasons noted above, the government showed an increased interest in this branch of trade, and lent liberal aid in furthering Russian interests in the East. The most striking evidence of the determination of the Russian government to extend its influence toward the Pacific Ocean was the construction of the Siberian Railway (1891). This was rather a political than an economic undertaking; it was enormously expensive, and failed to develop sufficient traffic to pay its way as a commercial enterprise. Its failure also in the field of international politics was signalized by the victory of Japan in the war with Russia in 1905, which checked definitely Russia's ambitions to play a dominant part in the Far East and put in her place an Asiatic power.

558. States of the Balkan Peninsula. — If the reader will examine a map of Europe about 1800 he will find that at that date the state of Turkey occupied the whole of the Balkan Peninsula, and included considerable territories even to the north of the Danube. The nineteenth century has witnessed the liberation of most of this land from Turkish rule; and some half dozen independent states have emerged and taken their place in the European system. These states, however, have neither in their political nor in their economic organization reached maturity. Like the Russians, the peoples of southeastern Europe belonged for centuries to Asia rather than to Europe, and the period of Turkish misrule, lasting down into very recent times, has effectually checked their development. Their states were still in the making, constantly disturbed by racial, religious, and dynastic quarrels. Their economic organization was still, in large part, medieval. Roads were scarce, and good roads were almost unknown. The implements and methods of agriculture were of the most primitive description. Some cultivators still used for a plow a crooked piece of wood with a single handle, and threshed their grain on the open ground by driving horses over it. Manufactures were still in the stage of the handicrafts, and were, in some cases, exercised by gilds like those of the Middle Ages.

559. Commerce of the Balkan States. — Conditions have been rapidly changing, as railroads and steamers have reached the peoples of the Balkans, and have brought them in touch with the advanced civilization of the West. The commerce of the Balkans, however, has been as yet important rather by its promise than by its performance. The total commerce between the contiguous states Servia and Bulgaria amounted in 1882 to less than a million dollars. The aggregate commerce of the four Balkan countries, Roumania, Bulgaria, Servia and Greece, in 1910–11, amounted to considerably less than one per cent of the total trade of the world, and was exceeded by the commerce of Sweden or Spain or even of the little country Denmark. The foreign commerce of the kingdom of Greece depended almost entirely on one product, the so-called Zante currant, a seedless raisin which got the name of currant from Corinth, whence it was carried to the island of Zante. The pig took in Servia a position almost equal in importance to that of the currant in Greece; great herds of swine were kept in the oak forests, and contributed largely to the chief export, that of animal products. On the plains of Roumania wheat was grown for export by a wretched population of tenants and laborers, who were still serfs until 1864. The governments of some of the states have endeavored by protective tariffs and various privileges to stimulate the growth of a mining and manufacturing industry; but the countries of the Balkan Peninsula will find in agriculture their chief resource for a long time to come, and will develop their commerce most rapidly by exchanging their surplus of raw products for the manufactures of central and western Europe.

QUESTIONS AND TOPICS

1. Character of internal trade in Russia. [Wallace, chap. 12; Palmer, chaps. 10–12; Schierbrand, chap. 9.]

2. The period of Mongol rule and its effects. [Wallace, chap. 14; Rambaud, History of Russia, N. Y., Burt, $2, vol. 1, chap. 10; Thompson, chap. 2; Noble, chap. 3.]

3. Condition of people and production in the time of serfdom. [Wallace, chap. 28; Palmer, chap. 5.]

4. Traveling by roads and rivers in modern Russia [Wallace, chap.1.]

5. The Crimean War. [Seignobos, chap. 27, first part.]

6. The period of reforms. [Wallace, chap. 27.]

7. Faults of the Russian administration. [Wallace, chap. 24; Schierbrand, chap. 11; Thompson.]

8. Emancipation of the serfs. [Wallace, chap. 29; Thompson, chap. 4; Noble, chap. 7.]

9. What were the chief exports and imports of Russia; with what countries was the most important commerce of Russia conducted? [Statesman's Year-Book.]

10. Character and significance of the foreign trade of modern Russia. [Hourwich in Journal of Polit. Econ., 1892–3, 2: 284–290.]

11. Domestic manufactures. [Palmer, chap. 20.]

12. Recent fiscal policy and protection. [Wallace, chap. 36; Schierbrand, chap. 3.]

13. Manufactures in modern Russia. [Palmer, chap. 19; Schierbrand, chap. 4; Oseroff, The industrial development of Russia, Forum, 1899, 27: 129–144.]

14. Condition of the agricultural population after emancipation. [Wallace, chap. 31; Palmer, chap. 8; Schierbrand, chaps. 5, 6; Thompson, chap. 4; Noble, chap. 7.]

15. Political, social, and economic life of the rural population. [Palmer, chap. 4; Wallace, chaps. 6–9.]

16. Famines in modern Russia. [Articles by various authors in Fortnightly Review, 1891, 56: 636-652; Forum, 1892, 13: 575–582: Nineteenth Century, 1892, 31: 1–6; Century, 1893, 46: 560 ff., etc.]

17. Faults of the modern system of agriculture. [Hourwich in Yale Review, 1892–3, 1: 411-433; in greater detail, in Columbia Studies, vol. 2, N. Y., 1892.]

18. Russian trade in China. [Calderon in Contemporary Review, 1900, 78: 389–396.]

19. Russia's hold on Persia. [Forum, 1900, 29: 147–153.]

20. Russian railway policy in Asia. [Long in Fortnightly Review, 1899, 72: 914–925, with map.]

21. Territorial expansion in the East. [Wallace, chap. 38; Noble, chap. 10; Schierbrand, chap. 1.]

22. The Siberian railroad. [See A. L. A. Catalogue, or use one of the following periodical articles: Norman in Scribner's, 1900, 28: 515–541; Davidson in Century, 1904, 67: 940 ff.; Kinloch in Monthly Review, 1901, 2: 60–71, with map, and with special reference to trade possibilities; Mikhailoff, in North Amer. Rev., 1900, 170: 593-608; Colquhoun in Monthly Review, 1900, 1: Nov., 40–55, with two maps.]

23. Choose one of the more important states (Turkey, Roumania, Bulgaria, Servia, Greece) and

(*a*) Trace its political history during the century. [Seignobos, chaps. 20, 21.]

(*b*) Study its recent commerce. [Statesman's Year-Book.]

BIBLIOGRAPHY

Though no history of Russian commerce has appeared in English, there are many good books on the history and conditions of the Russian Empire; and a considerable number have been published within a few years. For bibliography see the A. L. A. Catalogue and recent issues of the American Historical Review; a more complete bibliography, with chronological classification, will be found in Skrine, pp. 347–358. Compare, also, A. L. Morse, Reading list on Russia, Univ. of State of N. Y., State Library Bulletin, Jan., 1899, Bibliography, nos. 15–17. References to articles on Russian commerce in the first half of the century, in English and American periodicals, will be found in Homans, Cyclopedia, p. 1659.

Mavor, * Economic History of Russia, London, 1914, 2 vol., is a monumental work, particularly valuable for its study of institutional development. The history of Russia in the nineteenth century is treated by Seignobos, adequately for most purposes; more fully by Skrine, Expansion of Russia, London, 1900 (N. Y., Macmillan), in the Cambridge Historical Series.

The most useful books for our purposes are the descriptive works, most of which contain considerable historical material. First of these should be mentioned D. M. Wallace, ** Russia, N. Y., Holt, 1877, 1905; references in the topics are to the revised edition, 1905. Anatole Leroy-Beaulieu, ** The empire of the tsars, N. Y., Putnam, 1893, has the rank of a classic, but a large part of its three volumes treats topics removed from our direct interest. Among the smaller books the most useful are the following: Francis H. E. Palmer, * Russian life, N. Y., Putnam, 1901, W. von Schierbrand, * Russia, N. Y., Putnam, 1904, Edmund Noble, Russia, Boston, Houghton, 1900, H. M. Thompson, Russian politics, N. Y., Holt, 1896.

A work deserving special mention is ** Industries of Russia, published for the World's Columbian Exposition at Chicago, and edited in the English translation by John M. Crawford, St. Petersburg, 1893, 5 vols. with maps and charts. Volumes 1 and 2, paged continuously, cover Manufactures (with historical surveys) and Trade (brief on foreign commerce); volume 3 covers Agriculture and Forestry; 4, Mining; 5, Siberia and the Trans-Siberian Railroad. I cannot cover here the mass of literature on Russia's eastern policy, and refer for that to the bibliographical aids mentioned above. The U. S. Monthly Summary, Commerce and Finance, April, 1899, contained a compilation of various material on the Russian Empire and the Trans-Siberian railroad, with a map; another monograph, on European Russia, appeared in this series in 1904.

On Finland, a distinct part of Russia for the treatment of which the text offers no space, see N. C. Frederiksen, ** Finland, London, 1902, with bibliography; this is an excellent book, especially full on economic matters.

The Balkan States have attracted more attention from writers than accords with their recent commercial importance; for a general survey see Laveleye, * The Balkan Peninsula, N. Y., Putnam, 1887. On the conditions of commerce in the peninsula just before the World War see Day, The pre-war commerce and the commercial approaches of the Balkan Peninsula, Geographical Rev., N. Y., May, 1920, 9: 277–298.

TOPICS FOR REVIEW

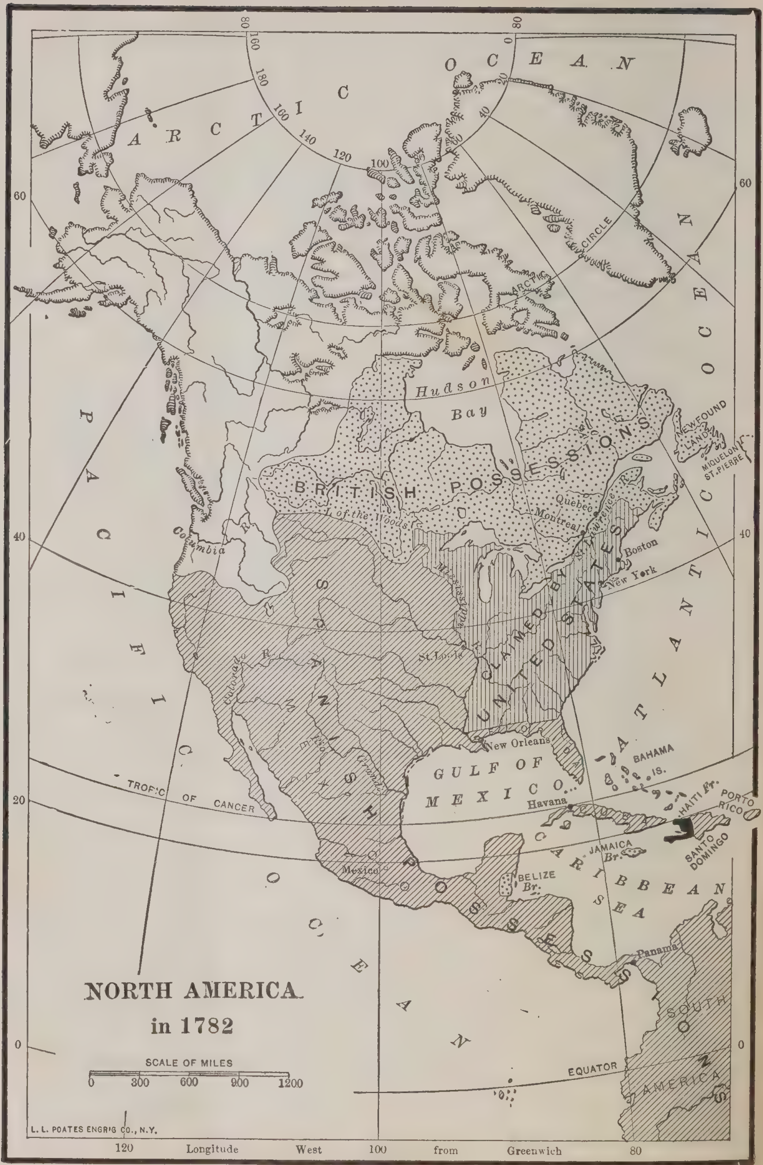
Among topics suitable for general review of the recent period, (1800–1900), the following may be suggested: (*a*) shipping; (*b*) transportation by canals; (*c*) transportation by railroads; (*d*) production and exchange of raw textiles; (*e*) finished textiles; (*f*) coal; (*g*) iron and steel; (*h*) introduction of steam and power machinery in manufactures; (*i*) commercial policy.

PART V. — THE UNITED STATES

CHAPTER XLV

THE ORGANIZATION OF PRODUCTION, 1789

560. Comparison of conditions in 1789 and in 1914. — The United States was in 1914 recognized as one of the greatest countries of the world in area, in population, in wealth, in efficiency of the organization of production and business, and in the volume of internal trade and foreign commerce. Little more than a century before, when it began its career as an independent state, it was an aspirant struggling merely for a respectable position among the minor powers. Its population, which in 1914 was nearly one hundred million, was in 1790 less than four million, placing it in this respect far below the great states of Europe, and not far above such little states as the Netherlands, Portugal, or Sweden. The whole settled area, comprising a strip along the Atlantic coast, and the mere beginnings of settlement beyond the Appalachian Mountains, was less than the area of the present state of Texas. The people were poor, and backward in industrial development. The amount of internal trade was small, even in proportion to the scanty population. The people were forced into foreign commerce by the necessities of their condition. They were as yet unable to supply the needs of civilization by wares of their own production. They had as yet developed no resources which assured their economic position in commerce with European powers, and in their political and military position they were so weak that they must beg as favors rather than demand as rights the opening of markets which were essential to their commercial growth.



NORTH AMERICA in 1782

The sharp contrast between 1789 and 1914 indicates clearly the importance of the subject which will be treated in the following chapters of the book, the history of the commerce of the United States. The student is asked to give his attention first to a detailed study of conditions existing about the year 1789. A survey of conditions at that date will furnish a summary of the development of the colonial period, and a basis for appreciating the national progress of more recent times.

561. Chief exports in 1790. — Following the plan pursued in earlier chapters we shall attend first to the exports of the country, composed of those wares which could be produced to such advantage that the people could sell a surplus of them abroad, and so secure the imports of which they stood in need. The following table gives the chief items for the first year of our national existence:

EXPORTS, 1790, IN MILLIONS OF DOLLARS

Northern products. —	Flour	4.5
	Wheat	1.3
	Lumber	1.2
	Corn	1.0
	Fish	.9
	Potash	.8
Southern products. —	Tobacco	4.3
	Rice	1.7
	Indigo	.5
Total (including decimals omitted)		16.6
Total exports, including items omitted		20.2

One characteristic of this table is noteworthy because it has marked the exports of the country from this early time to the present. The exports of the United States have always consisted not of a great many articles sold in small quantities, but of a few great staples sold in large quantities. Nine items, it will be observed, comprised over three fourths of the total value, and the two items, breadstuffs and tobacco, made up over half.

562. Predominance of agriculture; experiments with crops. — The table shows clearly that the strength of the United States at this time lay in what the economists call extractive industries, devoted to the production of raw materials. Some of the wares, it is true, had undergone the first stages of manufacture (flour, lumber, potash, indigo), but their chief value consisted still in the original material. In contrast with present conditions it was estimated at this time that nine tenths of the people were engaged in agricultural pursuits, and that even in New England, where industrial pursuits were most diversified, only one eighth were employed in manufactures, trade, or other occupations besides agriculture. Of twenty-one presidents of the United States (to 1880) fifteen were farmers or the sons of farmers.

The agricultural products of the table above represent the results of nearly two centuries of experiment in the search for profitable crops. It is not easy to determine what cultures will pay under the conditions of a new country. Early settlers had extravagant hopes of supplying the European market with silk, wine, olive oil, drugs, dyes, etc., and learned only by bitter experience that the conditions of nature and man destined America to a commercial career different from that of southern Europe or Asia. Most of the important crops and grasses were introduced to this country from other continents, Indian corn being, of course, the notable exception; and so thoroughly had the process of experiment been carried out that in the hundred years following the Revolution only one species of cultivated plant (sorghum) was introduced, of sufficient importance to be enumerated in the census.

563. Breadstuffs. — The crop of greatest importance to the people of the American colonies was, without question, maize or Indian corn. This crop, of native origin, flourished in all parts of the colonies, and yielded, under the conditions of a primitive agriculture, far richer returns than could be secured from any of the European grains. To the domestic food supply it was indispensable. For export purposes, however, it was less desirable, and though moderate quantities were shipped abroad every year, the demand of foreign markets, as appears in the table, was chiefly for wheat and wheat flour. Wheat was at this time a costly luxury in New England, but it could be grown to advantage in the middle colonies and in Virginia; and in the particular period which we are studying it assumed a leading position among the exports. European countries had formerly been unwilling to receive a product which competed with their own agriculture, but the failure of crops in Europe, the outbreak of the French Revolution (1789), and the long wars following, caused a great increase in the demand for our food products, and gave rich returns to the wheat farmers who had been suffering from the lack of a market.

564. Other products of northern agriculture. — Aside from the cereals the agricultural exports of the middle and northern colonies were unimportant. Many attempts had been made to grow flax and hemp, to sell in competition with the produce of Russia and other Baltic countries. The seed of the flax was exported, but the preparation of the fiber was too troublesome to pay the producer, and though coarse fabrics for home wear were made of it and it was used for sewing shoes until the invention of the wooden shoe peg, the export of flax and hemp fiber remained insignificant.

The second place among exports of northern agriculture, after breadstuffs, was taken by stock and meat products. The abundance of pasture land encouraged farmers to raise a surplus of live stock for sale, though as yet they paid but little attention to breeding or to the proper care and fattening of the animals. Horses were shipped to Canada and to the West Indies, while salt beef and salt pork had a ready sale for provisioning ships, and for export to the West Indies. The export of live animals and provisions amounted, however, to less than one million dollars.

565. Southern staples; tobacco. — Many of the export products above mentioned could be raised in the southern colonies, and all of them were, in fact, produced there to some extent. The people of the South, however, were fortunate in finding conditions suited to the production of some special crops, which, unlike those of the North, could not be produced to advantage in Europe, and which therefore were more readily taken in trade. The Southerners followed their interests, therefore, by raising of foodstuffs only what they absolutely needed, and by applying themselves to their special staples. Of these tobacco was by far the most important throughout the colonial period. It was asserted at one time that a man could provide grain for five men and clothes for two, by the sale of the tobacco which he could grow unassisted. Until the rise of the cotton culture tobacco was king among the southern staples, and had no rival export at the North of equal importance; through the eighteenth century it formed about half of the total exports of the colonies to England, and only just before the close of the century did it yield the leading place to wheat. Disadvantages of a one-crop system, entailing sharp fluctuations in price and periods of dearth, the rapid exhaustion of the soil under tobacco, and the encouragement of negro slavery,— all these evils could not turn the planters of Maryland and Virginia from a crop which, on the whole, yielded rich returns.

566. Rice and indigo. — In Carolina rice took the position held by tobacco in other southern colonies. Its cultivation became of practical importance only toward 1700, starting, it is said, from the gift of a small parcel of rough rice by the captain of a ship bound from Madagascar to Liverpool, who was forced to put into Charleston for repairs. The grain found a ready market in southern Europe and in the West Indies, and became soon an important article of export, though the modern method of water culture was not introduced until nearly 1800.

The only other item of southern produce deserving special mention in this place is indigo. This plant, the reader will remember, was the source of a blue dye which at the time was highly prized and which, indeed, has only recently been displaced by anilin colors. Attempts had been made in the early colonial period to raise indigo, but no success attended them until about 1750. After that date the culture flourished in South Carolina and Georgia; aided by a bounty from the British government the planters exported large quantities and secured handsome returns. The preparation of indigo was, however, an unwholesome occupation, as the plant, after being soaked in water, was left to rot, giving out an offensive odor and drawing innumerable flies. It was an indication of progress, therefore, that indigo culture declined rapidly after 1790; planters gladly took up the cotton culture, and the United States soon secured by importation from abroad the ware of which it had formerly produced a surplus.

567. Methods of agriculture. — Though agriculture as a source of wealth overshadowed all other industries in the colonies, it was conducted with methods which we should now consider extremely inefficient and wasteful. Washington wrote to an agricultural specialist in England: "An English farmer must have a very indifferent opinion of our American soil when he hears that an acre of it produces no more than from 8 to 10 bushels of wheat; but he must not forget that in all countries where land is cheap and labor is dear the people prefer cultivating much to cultivating well."

The plow, the most important implement of agriculture, was still at the time of the Revolution substantially unchanged from the models of ancient times. The mould-board, of wood as the name implies, was sometimes plated with sheet iron or with strips made out of old horseshoes. President Jefferson improved the shape of the mould-board, and about the end of the century the cast-iron plow began to come into common use. The sickle gave place to the scythe and cradle, but threshing was still done with a flail or by driving horses over the grain. There was a marked increase in the interest in agricultural science and methods about the time when the national government began, agricultural societies were founded in many states, and progress thenceforth was more rapid.

568. Forest products; potash. — If the reader, after this review of the agricultural exports of the country at the beginning of its national existence, will refer again to the table above, he will find that export products of considerable importance were derived also from the fisheries and the forests.

The eastern slope of the country was so heavily wooded that trees were regarded rather as a hindrance than a help by the colonists. It was good philosophy, however, to make the best of them; and the British government, during the colonial period, encouraged the export of forest products, to avoid depending on the Baltic countries for the supply of wood and naval stores. The most spectacular export of this description was that of the great masts and spars, which formerly had been reserved for the government by the mark of the broad arrow, and which were hauled out of the woods in winter by fifty yoke or more of oxen. Most of the wood, however, left the country in smaller form: staves and heading, which were sent to the West Indies and there set up into casks and hogsheads for the carriage of sugar products; boards, shingles, etc.

When wood ashes are leached, and the water evaporated, the product is potash; if this be refined by heating it is termed pearlash. It is an impure carbonate of potassium, and at this early stage of chemical industry it had an immense importance in the arts, being used in bleaching, the manufacture of glass, soap, etc. Besides enjoying a ready sale potash had another peculiar advantage in this period; it was, besides the naval stores (pitch, tar, turpentine, rosin), the only wood product which could be readily transported on land. It was, therefore, a great resource when land was cleared; and practically every new settlement, in the northern colonies at least, had its potash works, in which useless wood was converted into a valuable export product.

569. Fisheries. — "The fisheries first and mainly placed New England on its legs." The people of the northern shore were driven to the sea by the difficulties of life on land; and used the proceeds of the fishing industry as the means of purchasing their imports from abroad, and part even of their food supply from other colonies. They had advantages over European competitors in their nearness to the great fishing grounds and in their skill in building and navigating boats; and though the proportion of the total population engaged in fisheries was never large (about one thousandth at this time), the product was sufficiently important to take a respectable rank among the exports of the country. Every year more than five hundred boats left the towns of the Massachusetts coast, especially Gloucester and Marblehead, for the banks of Newfoundland, while Nantucket and New Bedford became the source of whaling voyages that reached from the Arctic to the Antarctic oceans.

In comparison with the fisheries the fur trade had become of little importance; the European demand for furs was met at this time by territory lying to the north of the limits of the United States.

570. Chief imports, 1791. — The method, or rather the lack of method, followed by the government in keeping its commercial statistics in early days, renders it impossible, unfortunately, to present here a table of imports in 1790 comparable in accuracy and in detail to the table of exports given above. We must content ourselves with the following estimates for the year 1791.

IMPORTS, 1791, IN MILLIONS OF DOLLARS

Articles paying duties *ad valorem*		17.0
Wines, spirits, malt liquors		2.6
Colonial wares. — Sugar	1.6	
Molasses	1.4	
Coffee	.5	
Tea	.3	
Total, Colonial, including minor		4.0
Total, including minor items omitted		25.0

571. Classes of wares imported; manufactures. — The table shows, on its face, only one thing with clearness, that the people used already a considerable part of their surplus to purchase articles of food, of the nature rather of luxuries than of necessaries, which could not be produced to advantage at home. This feature has ever since characterized the import trade of the country. In the recent commerce of the United States we find, beside the class of colonial products, two other classes comprising the bulk of the remaining imports, manufactures and material for manufacturing. Were articles of these two classes masked behind that large item of the table which classifies the imports only with reference to tariff schedules? The answer can be given, without hesitation, in the affirmative. Raw materials for manufacturing were still, however, comparatively unimportant; most of the imports to this country, at the beginning of its national existence, were finished manufactures. The statement made by a writer in 1818 held true at this time: "Our imports consist chiefly of articles which habit and fashion have made necessary for our consumption: but a very small proportion of them is subservient to our arts and manufactures."

To describe the character of these imported manufactures in detail would be an arduous task, for they included the products of practically all the handicrafts and factories of Europe. In contrast with the exports of the country, which have been restricted always to a few great staples, the imports, from earliest times to the present, have been extraordinarily diversified. The imports included, besides the items specified in the table above, a large part or the whole of the metals used in the country (tin, copper, lead, pewter, brass, and iron), and manufactures of metal. They comprised, further, a great quantity of the various textiles, of woolen, cotton, linen, and silk; and miscellaneous manufactures such as glass and earthen ware, paper, leather wares, etc.

572. Significance of the import of manufactures. — Accepting now as the most important characteristic of the imports of this period the preponderance of manufactured articles, we must seek to realize why this was so, and what it signified. Anticipating the substance of following sections it may be said, in summary, that the people of the United States supplied their need for manufactured articles by their own handiwork, so far as possible, but that they found it unprofitable to attempt to make wares the manufacture of which required high technical skill, the use of machinery, and an advanced organization of business. They depended on Europe, therefore, for all the finer manufactures. The total amount of manufactures imported annually was not large in proportion to the population, being less than $5 per head; yet this amount comprised most of the comforts and luxuries as well as many of the necessaries, which the people enjoyed. Even at the end of the colonial period the average American led a life of struggling and privation, and could think himself fortunate if he won by his toil on land or at sea a surplus sufficient to provide him with a few articles beyond the bounds of his absolute necessities.

573. Household self-sufficiency. — In contrast with the modern scale of living the simplicity of the standard of life at this period can scarcely be exaggerated. Most of the articles consumed in a family were produced at home. The house was begun with the help of neighbors, and was finished, perhaps long afterwards, by the inmates themselves. Domestic utensils, household furniture, and farm implements were still made, to a large extent, on the farm where they were used. The every-day clothing of the people, made from linen or wool or from a combination of the two ("linsy-woolsey"), was spun and woven, cut out and made into clothes, with comparatively little professional help. Carpets were made from woolen yarn spun in the family, sent away only to be dyed, and then woven either at home or in the neighborhood. The self-sufficiency of the family group was not so complete in 1800 as it had been in 1700, but it continued still to be the dominant feature in economic life, and in some districts lasted for decades to come.

574. Town self-sufficiency. — Articles which were not made in the household were, as a rule, made in the town, and did not contribute to the volume of distant trade or of foreign commerce. The important unit in the economic organization of the United States at this period was the rural group of perhaps a few hundred inhabitants. Most of the people were farmers, as has been said above, and very few were entirely independent of farming. Some, however, had the skill and implements which enabled them to supply the needs which could hardly be met by household production. Nearly every village had a gristmill, and, if conditions favored, a sawmill. The village blacksmith was to be found in almost every settlement, and performed an astonishing variety of work for the people. Toward 1800, moreover, a tannery had become a common though not a universal feature of village life, and most towns could now boast of a shoemaker. Some still depended, however, on the itinerant cobbler, and few were large enough at this time to furnish paying custom to special artisans; and relied on traveling tinkers, glaziers, coopers, curriers, etc., to perform the services proper to their trades.

575. Development of household manufactures. — Only in a few lines of manufacture had the organization developed beyond the simple lines sketched above. The making of cloth is an operation requiring much time, considerable technical skill, and, for some processes, machinery such as few households would possess. By 1700 it had become customary to rely upon professionals for fulling, the process which compacts the fibers of the cloth, and fulling mills were widely distributed in 1800. Carding machines, for straightening the fibers of wool before spinning, were to be found in many towns, and it was more and more common, also, to have the weaving done out of the house, though this process was ordinarily attended to in the immediate neighborhood. With outside aid of this character the people of some parts of the country were able to produce cloth in excess of their needs, and could use the surplus in trade.

Nearly every town, moreover, in the northern and central colonies, had some industry which utilized the spare time of the inhabitants, and gave them the means of exchange with people in the colonies or abroad. For a characteristic description take the following of Raynham, Mass., 1793, when the town had a population of about 1,000: "Besides the usual business of husbandry, numbers are here employed in the manufactories of bar iron, hollow ware, nails, irons for vessels, iron shovels, potash, shingles, &c."

576. Appreciation and criticism of American manufactures at this time. — It would be tedious and unprofitable to study in detail the petty manufactures which cropped up in the various towns of this period. Let us accept as a summary the following statement, applying to the decade ending in 1800: "The domestic manufactures best established are those of leather, iron, flax, potters' wares, including bricks, ardent spirits, malt liquors, cider, paper of all kinds, hats, stuff and silk shoes, refined sugars, spermaceti and tallow candles, copper, brass and tin wares, carriages, cabinet wares, snuff, gunpowder and salt."

In studying this description the reader should bear certain facts in mind. First, the list, however long it seems, is far from including all the wares required for the satisfaction of ordinary wants. Second, though these manufactures are stated to be the ones best established, there was, among them all only one sufficiently strong to produce a considerable surplus for sale outside the country; this was the rum manufactures. The people still relied largely on importations from foreign countries for many of the wares enumerated. Third, many of these manufactures (bricks, cider, snuff, and salt, for example; flour and sawmill products might properly be included) were of a very simple character, requiring no great technical skill or elaborate machinery. Water power was used widely, but steam power had not yet been applied, and improved machinery had not yet been introduced from Europe. The factory system, with its extensive use of machinery and its strict organization of labor, was first permanently established in the United States in 1790, at Pawtucket, R. I.; and the American factories did not, for many years, reach the English standard of efficiency. An English committee reported in 1791 that the American cotton manufactures were of a coarse grade, of worse quality and of higher price than those produced at Manchester.

QUESTIONS AND TOPICS

1. How do the population and settled area of the United States in 1790 compare with those of the State in which you live now?

2. Has any country ever enjoyed such growth as that of the United States in the nineteenth century? What country or countries come near us in rapidity of progress?

3. Prepare a chart, in the way previously suggested, and preserve it for comparison with the exports in later periods.

4. What is the proportion of persons now occupied in agriculture in your State? in the State where the proportion is highest? [Abstract of Census.]

5. What are the comparative advantages and disadvantages of corn and wheat as commercial crops? Which crop occupies the greater acreage in your vicinity, and why?

6. Write a report on one of the following crops, its preparation, uses, and history in the United States:

(*a*) Flax. [Encyclopedias; E. A. Whitman, Flax culture, Boston, 1888, Barker in Quarterly Jour. Econ., 1917, 31: 500–529.]

(*b*) Hemp. [Encyclopedias; C. R. Dodge, Report no. 8, U. S. office of fiber investigations.]

7. Profits and losses in the colonial tobacco culture. [Bruce.]

8. Do you know of any region which suffers from the evils of the single-crop system now?

9. Advantages and disadvantages of rice as a crop; where is it chiefly grown now? [Encyc.; commercial geographies.]

10. Experience of a woman as an indigo planter. [Earle, Colonial dames, Boston, Houghton, 1895, $1.50, pp. 76–83.]

11. What is the average crop of wheat per acre now, in the U. S., and in your vicinity? [Census.]

12. Details of colonial agriculture. [Coman, 47–62.]

13. The lumber industry in New England. [Lord, Indust. exper., part 3, chap. 1; Wright, 71–79.]

14. History of the American fisheries. [Coman, index; Van Metre in Carnegie Hist., vol. 2, part 2.]

15. The whale fishery. [Weeden, chap. 11; McMaster, Hist., 1: 63, with references.]

16. Manufactures imported by Virginia in the colonial period. [Bruce, chaps. 15, 16.]

17. What parts of the United States are now in a position like that

of the colonies, devoting their labor to the production of raw materials and importing manufactures from the regions of advanced industry? What foreign countries are still in this position?

18. Write a report on the household industries of the colonial period [Books by Alice M. Earle.]

19. What household industries are declining now? [The preserving of fruit may suggest other examples.]

20. A typical New England town. [See the description of Braintree, Mass., in C. F. Adams, Three episodes, Boston, 1892.]

21. The textile industry in the colonial period. [Wright, Ind. ev., 43–60.]

22. The rise of manufactures and the attitude of Great Britain. [Lord, Indust. exper., part 3, chap. 2; Coman, 62–76.]

23. The iron industry. [Wright, Ind. ev., 80–103.]

BIBLIOGRAPHY

General Bibliography. —Channing, Hart and Turner, Guide, revised ed., Boston, 1914, (general) Bogart, Lippincott, Emery in Cambridge Mod. Hist., 7: 825–829, (classified); Coman, (alphabetical); E. R. Johnson, (railways); Dewey, Financial History, N. Y., Longmans, (fiscal); A. L. A. Catalogue, (popular books in print). The Literature of American History, ed. J. N. Larned, Boston, 1902, has been continued (for most years, to and including 1917), by annual lists, Writings on American history, published since 1912 by the Yale University Press.

General. — The most important single works are the ** Contributions to American economic history from the Department of economics and sociology of the Carnegie Institution of Washington: History of domestic and foreign commerce of the U. S., by E. R. Johnson, T. W. Van Metre, G. G. Huebner and D. S. Hanchett, 2 volumes (cited hereafter as Carnegie History); History of transportation in the U. S., before 1860, under direction of B. H. Meyer; History of Manufactures in the U. S., 1607–1860, by Victor S. Clark. Foreign trade is treated in connection with other topics in N. S. Shaler, ed., * The U. S., N. Y., Appleton, 1894; C. M. Depew, ed., * Amer. commerce; T. D. Woolsey, ed., First century of the Republic, N. Y., Harper, 1876; McMaster, * Hist. (general narrative); Bogart, * Econ. hist., (manual); Lippincott, * Econ. development (manual); Wright, Ind. ev. (manual); Coman, * Ind. hist. (manual). On special branches of foreign trade see S. J. Chapman, History of trade between United Kingdom and U. S., Lond. and N. Y., 1899; F. R. Rutter, The South American trade of Baltimore, Baltimore, 1897; J. M. Callahan, American relations in the Pacific, Baltimore, 1901.

Commercial Policy. — On tariff history ** Taussig is by far the best guide; of the many other books on the subject (see bibliographies above) most are too prejudiced to be put in the hands of immature students. On the merchant marine and shipping policy see ** W. L. Marvin, ** J. R. Spears, and * W. J. Abbot. For defence of protection and subsidies, W. W. Bates, American marine, Boston, 1893, American Navigation, Boston, 1902; for criticism, D. A. Wells, Our merchant marine, N. Y., 1890.

SPECIAL TOPICS. — Readers should consult the bibliographies listed above for references on particular industries. The histories of Ringwalt, Hammond, and Swank are likely to prove especially useful.

SOURCES. — The chief source is the annual report on commerce and navigation, which is cited hereafter by abbreviation, Com. & Nav. Reports for the years from 1789 to 1823 are in the collected set of American State Papers; later reports must be sought in the set of Congressional documents. The Check-list of Public Documents, Washington, 3d. ed., 1911, is an indispensable aid in using government publications.

EARLY AMERICAN COMMERCE

COLONIAL. — ** Weeden, ** Bruce,** Beer. More general in character are the various writings (see A. L. A. Catalogue) of * John Fiske, * C. M. Andrews, * Alice Morse Earle, * Sydney G. Fisher. On commercial policy of the colonies see (besides Beer, and Hill cited below) A. A. Giesecke, American commercial legislation before 1789, Univ. of Penn., N. Y., 1910. On manufactures see Rolla M. Tryon, * Household manufactures in the U. S., 1640–1860, Univ. of Chicago Press; on shipping, R. D. Paine, * Ships and Sailors of old Salem, N. Y., 1909, and R. E. Peabody, * Merchant venturers of old Salem, Boston, 1912.

EARLY NATIONAL PERIOD. — Mahan, ** War of 1812, vol. 1; Fiske, ** Critical period, Boston, Houghton, 1899, $2; McMaster, ** History, and ** Chapter 9 of Cambridge Mod. Hist., vol. 7. On the development of the commercial organization, S. E. Baldwin, American business corporations before 1789, Amer. Hist. Review, April, 1903, 8: 449–465; G. S. Callender, ** Early transportation and banking enterprises, Quarterly Jour. of Econ., Boston, Nov., 1902, 17: 111–162. On commercial policy, William Hill, ** First stages of tariff policy, Pub. Amer. Econ. Assoc., 1893, 8: 452–614; T. W. Page; ** Earlier commercial policy, Journal of Pol. Econ., Chicago, 1901–2, 10: 161–192; Henry C. Adams, * Taxation in U. S., Baltimore, 1884.

CHAPTER XLVI

INTERNAL TRADE AND FOREIGN COMMERCE, 1789

577. Development of internal trade 1789–1914. — It will be impossible, in the later chapters of this book, to describe in detail the development of the internal trade of the United States. This trade has grown to such proportions that, at the present day, it far outranks in volume and importance the foreign commerce of the country. The reader may be trusted to realize this fact, and to have some knowledge of the character and organization of internal trade at the present day. It is not probable, however, that he knows the humble origins from which this trade has risen; and a description of the conditions and character of internal trade about 1789 will enable him to appreciate the progress of the past century, even though the different steps in progress receive but scant mention in the narrative.

578. Condition of the roads; effect on freight traffic. — The roads, which furnished the only means of communication and transportation by land, were still the earth roads of the colonial period, thick with dust in summer, and absolute sloughs, with mud a foot or more deep, during the thaws of winter and spring. During the greater part of the colonial period wagons were a rarity, because there was so little opportunity to use them. Men used mere sledges on the farm, and traveled or carried their produce from one farm to another on horseback. In the northern States the facilities for land carriage were good in only one season, winter, when the periods of sleighing enabled the people to make the market trips and visits which were impracticable at other times. Even near the large towns laden carts had to be drawn by two to six oxen, when there was no snow on the ground.

When there was no other means of transportation, as in the case of the settlements west of the Alleghany Mountains, wares were carried over the roads in wagons, sometimes for a distance of hundreds of miles; but such instances of extensive land transport were exceptional, and the freight charges were so high that only articles of the first necessity, as salt and iron, could pay for carriage.

579. Sparsity of passenger traffic. — Some men lived and died in the town where they were born, without visiting another town a dozen miles distant. There was so little intercourse between the adjoining towns of Easthampton and Southampton, on Long Island, that each town preserved individual peculiarities of pronunciation down even to 1800. Throughout the colonial period, and even in the days of the early Federal government, it was very difficult to collect delegates at a political gathering; and it was not uncommon for men to make their wills before starting to a State convention in Pennsylvania. Travel by stage-coach did not become of importance until well into the nineteenth century. In 1783 two stage-coaches, consuming a week or ten days on the trip, sufficed for the travel between Boston and New York; though a few years later (1794) twenty stages were employed. Postage rates for a single letter ranged from 8 to 25 cents, according to the distance, and mails were infrequent.

580. Relatively great importance of waterways. — Like the people of the Middle Ages, the inhabitants of the United States at this period were driven to the use of water transport by the difficulty of transportation on land. Rivers which are used now only by canoes and pleasure boats were then important means of communication and transportation. The Connecticut River has now a scant traffic as far as Hartford, about forty miles from its mouth; in 1816 we read, "The Connecticut River is navigable 200 miles above Hartford, for Boats, of 15 tons, and 50 miles higher, for Floats and Pine Timber"; large quantities of potash were carried down the river even from the Canada line. The Hudson and other rivers were the channels through which export products were collected and brought to the sea, and the farmers of central and western New York sent their wares to market by rafts and "arks" on the Delaware and Susquehanna. Waterways were of especial importance in the southern States, where the means of land transportation were even less developed than in the North; tobacco was brought to the wharves on inlets and rivers by "rolling-roads," rough tracks over which the hogsheads were rolled with the assistance of a horse.

581. Importance of the country store. — The great institution of trade at this period was the country store, which collected the surplus products of the townspeople and gave them in exchange the wares imported from abroad. Every town of any size had one of these stores, and only the largest towns had distinct shops for the sale of special articles. The stock in trade of one of the typical country stores included all of the articles which have been mentioned among the imports of the country: sugar, molasses, tea, coffee, metals, and hardware, cloth, thread, books, glass, earthenware, etc. The list on the other side of the store-keeper's books would be as long, for it included all the export products of the country, and some wares which were sent to market in the large towns or in other States. The merchant must always be prepared to receive in pay for his goods "Grain of all kinds, beef, pork, poultry, cheese, butter, eggs, nuts, berries, hides, tallow, candles, lard, domestic flannels, feathers, quills, braided straw hats, potatoes, apples and other fruits, both green and dried, home-made brooms, flax and flax seed, cider and domestic wines, etc." At the period which we are studying, well past the close of the colonial period, barter was still the usual form of exchange, and money rarely passed at the transactions in the store or in the trade between the townspeople and the village artisans.

582. Benefits and disadvantages of the country store. — The country store was the focus of the village, not only in economic but in political and social life as well. There was no better training school in the world for the study of human nature and the development of business sense. Practically all of the business life of the times was concentrated in these stores, and it is, therefore, not surprising, that few men rose to eminence later in the mercantile world who had not passed a period of apprenticeship in one of them. Charles Tiffany, Levi P. Morton, E. D. Morgan, H. B. Claflin; of a later period Marshall Field, Pullman, Pillsbury, Armour, J. D. Rockefeller, J. J. Hill, and many others; all these rose from the position of clerk in a general store to the place which they attained in later life.

From the standpoint of the villagers, however, it was a great disadvantage to have the market for their produce restricted to the store in their immediate vicinity. The store-keeper in the smaller towns had no competitors, and enjoyed a practical monopoly of trade of which he took full advantage in driving his bargains. In the northern colonies, where the difficulties of transportation were leveled by the snows of winter, the people could attain a certain measure of independence of the country store by making market trips to one of the larger towns. Neighbors would agree upon a date and set off, sometimes in a troop of fifty or sixty. They loaded their sleighs with a supply of food for the journey, and with the produce of the farm and household, and sought out the nearest large town, Portland, Newburyport, Boston, Providence, Springfield, Hartford, etc. In one of these market centers they could make much better bargains than at home.

583. Relative smallness of interstate trade. — When the products of the country had been collected at the large coast towns by the farmers and store-keepers, they were, for the most part, exported to foreign countries. Interstate commerce was as yet comparatively small. There was, it is true, an active coasting trade, but this was employed chiefly in the collection and distribution of goods along short stretches of coast. Small vessels plied frequently from the large ports like Boston, New

York, Philadelphia, and Charleston, to the country districts on either side, but rarely made extensive trips, as from Boston to Charleston, for instance.

Commerce between States as distant even as Massachusetts and South Carolina existed and was by no means insignificant in absolute amount. The northern colonies sent a part of their surplus of rum, live stock, dairy products, and homemade cloth to the South, and brought back tobacco or bills on England which they could cash. Still, comparing this trade with other elements of internal trade, with the foreign commerce of the time, or with interstate commerce of later times, the striking thing about it is not that it was so large, but that it was so small.

584. Share of different States in foreign commerce. — The relative contributions of different parts of the country to its foreign commerce can be shown by the following summary, giving the exports by localities in the year 1791. The chief States ranked as follows, giving values in millions of dollars and indicating the leading ports in parenthesis: Pennsylvania, 3.4 (Philadelphia); Virginia, 3.1 (Bermuda Hundred, Norfolk); South Carolina, 2.6 (Charleston); Massachusetts, 2.5 (Boston); New York, 2.5 (New York); Maryland, 2.2 (Baltimore). No other State or port exported as much as one million; and exports from all the other States together amounted to little over one tenth of the total of nineteen millions.

The striking feature of the table is the relative importance of the southern States in foreign commerce, an importance which they were destined to hold for a long time to come, as the cotton industry was developed. It must be remembered, however, that the figures refer only to the export trade, and that there would be considerable changes in rank if we could include the import trade. Taking as a rough means of measuring imports the amount of duties collected, we find, for example, in the first year of the national government, that though Pennsylvania again headed the list, the second and third in rank were New York and Massachusetts respectively, while the southern States ranked lower by very considerable amounts. This period which we are studying was, moreover, one of rapid change, marked especially by the development of the central and northern colonies. Taking the year 1795, when these colonies were profiting by a great increase in their food exports, and when the cotton trade was still undeveloped, New York had risen to the second place in exports and Massachusetts to the third.

585. Development of the chief seaports into cities. — The seaports named in the preceding section had gained from trade an amount of wealth and population, which, however small it may seem from the modern standpoint, put them in a class above the ordinary towns, and made them the representatives of a more advanced business organization. The most populous of these places had in 1790 a population of only about 30,000 (in thousands, New York 33, Philadelphia 28, Boston 18, etc.); and the total number of people living in towns of over 8,000 inhabitants was still only about 130,000. In other words, only one person in thirty lived in a large town or city. The budding cities retained many of the rural characteristics of the towns from which they had grown. A mere beginning had been made in paving the streets, and many people still kept kitchen gardens. The price of provisions, however, was rising rapidly, and the cities had become dependent on trade with the country districts for most of their supply. Cattle were fattened in the Connecticut valley for the New York and Philadelphia markets, and wood for heating and building was brought by coasting vessels from considerable distances.

The large towns could boast of a diversified industrial population, in which many special branches of manufacture were represented, and of numerous shops; Boston was credited with 366 stores in the enumeration of 1789. The first commercial bank of discount and deposit in the United States began operations in Philadelphia in 1782, and about 1800 there were 33 banks of this kind in the country.

586. Foreign countries of the greatest commercial importance to the United States. — An indication of the direction of commerce is furnished by the following table, showing the chief countries to and from which the United States shipped wares in 1790. Figures give the values in millions of dollars.

		Exports	*Imports*
Great Britain and her dominions		9.3	15.2
Including British West Indies	2.0		
France and her dominions		4.6	2.0
Including French West Indies	3.2		
Spain and her dominions		2.0	.3
Including Spanish West Indies	.1		
The Netherlands and her dominions		1.9	1.1
Including Dutch West Indies	.6		
Portugal and her dominions		1.2	.5

The figures of imports are based on estimates, and no sum is given for the total amount of the year; the total exports were but slightly above twenty million, and countries the names of which do not appear received but insignificant amounts of our goods.

587. Insignificance of direct trade with Asia and Africa. — Some reasons for the direction of American commerce at this period will appear in the next chapter, in which the commercial policy of European countries will be discussed. I propose here merely to point out some of the striking facts shown by the table, and to indicate their connection with the development of American commerce in the colonial period.

Attention may be drawn, first of all, to the significance of omissions from the table. In the year in question the United States sent to the two great continents of Africa and Asia less than one third of a million dollars of exports. The imports, especially from Asia, were probably somewhat larger, for American vessels had begun to frequent the ports of East India and China, and to bring direct from them the rich cargoes which formerly had reached America through the hands of English middlemen. Still, any reasonable estimate of the trade with distant continents would leave it insignificant in comparison with the European trade, which formed the mainstay of American commerce.

588. Unique position of England in trade with the United States. — Of the European countries there was one which occupied a position of commanding prominence. Great Britain received of our goods more than all the rest of Europe together, and sent us of her own far more than all the other European states could supply. It is noteworthy, and was so regarded at the time, that this country, after a bitter struggle for political and commercial independence, and after having broken the bonds which were supposed to hold her in subjection to the English market, should voluntarily resume the trade relations which had formerly been considered so oppressive. The great amount of our trade with England is the more remarkable, as it covered a considerable amount of trade with other countries. England felt as yet no great need for our export products, and forwarded to other countries a considerable part of what she received. Of the imports which we received from England, on the other hand, while the greater part was doubtless the product of English manufacturing industry, there were many wares which came from other countries, but which we found could be purchased more conveniently in England than at the original place of production.

589. Commerce with the rest of Europe. — It was but natural that the United States should have a commerce of some importance with states like France and the Netherlands, which were still among the leaders; and it can only be regarded as surprising that this commerce was so small in comparison with that with England. Our trade with eastern Europe was carried on so largely through England that Germany and the Baltic countries would make but an insignificant showing if they were included in the table. Our trade with southern Europe, however, was evidently governed by other conditions. Portugal and Spain could furnish few desirable wares of their own production, except wine; the table shows that the imports from those countries were small. They offered, however, what we sought in vain in northern Europe, a ready market for our fish, cereals, and other foodstuffs, and were hence of great importance to our export trade. Commerce with the Mediterranean countries, which had been interrupted during the Revolution, had not since then been developed to any considerable proportions, because of the ravages of the Algerine pirates. These countries had formerly taken a quarter of our fish exports, and about one sixth of our wheat and flour shipments; and trade with them revived later when our navy had brought the pirates to terms.

590. Importance of the West Indies as an outlet for wares excluded from Europe. — A place of very peculiar importance in the commercial economy of the American people, in the colonial period and well past the time which we are now studying, was taken by the West Indian islands. Of the chief products of the United States those coming from the South, especially tobacco, were sure of a good market in Europe, and were a ready means of purchasing the manufactures which the people needed to import. The chief products of the North, however, including breadstuffs, provisions, and fish, enjoyed no such favorable reception. The statesmen of England and other countries clung still to the plan of protecting domestic agriculture by assuring it the home market, and desired to encourage domestic fisheries as a means of supporting the navy. In the colonial period, therefore, the staple products of the central and northern colonies were kept out of England and other States by heavy duties or by prohibitions. The people of those colonies, therefore, were at a great disadvantage in their trade with the mother country: they found it difficult to secure the means of paying for the English manufactures which they imported, and were forced to rely in some measure on the crude products of their own domestic manufactures, as described in a previous chapter.

591. Character of commerce with the West Indies; triangular trade. — The very products, however, which were rejected in Europe, were keenly desired in the West Indies. The islands had become the great source of the world's sugar supply, and the advantages of sugar production, under the system of slave labor, were so great that planters neglected all other crops and did not produce even a sufficient amount of food for their laborers. They were eager to purchase food either by the direct exchange of sugar and molasses, or, what amounts to the same thing, by giving the seller bills on Europe drawn against sugar products shipped thither. They offered a ready market, therefore, for the wheat, flour, corn, meat, and fish of the mainland, and purchased also large quantities of lumber and shingles for building, staves for hogsheads, etc. The colonies of the mainland took in pay considerable amounts of sugar and molasses for their own use, and took molasses also for the manufacture of rum, of which part was exported. On the whole, however, the mainland exported to the islands more than it received from them, and had thus a credit balance with which it could liquidate its debts for European manufactures. The conditions thus gave rise to a triangular trade: the mainland shipped food and lumber to the West Indian islands; the islands shipped sugar products to Europe; and Europe shipped manufactures to the American mainland, thus closing the transaction. So strong was the economic demand for a trade of this description, that the attempts of European governments to check it had proved entirely unsuccessful in the colonial period; restrictions were evaded by smugglers or were openly defied. The problems of policy relating to this and other parts of the American trade after 1789 will be treated in the next chapter.

592. Development of ship-building in the colonial period. — A resource of the United States which deserves to be mentioned, before we close this survey of the conditions of commerce about 1789, was the building and sailing of ships. The colonies were at first dependent on the mother country for the vessels which they used. Most of the raw materials for ship-building were, however, abundant in America; and the construction of ships, unlike other manufacturing industries, was rather helped than hindered by British colonial policy, which put colonial vessels on the same footing as those which were built at home, and protected them from the competition of the ships of other countries. An active ship-building industry grew up, therefore, especially in New England, where ship timber of the finest quality was abundant, and where the difficulties of life and the discouragement of staple exports forced the people to make the most of every resource. A petition of Boston citizens in 1746 calls ship-building "the ancient and almost the only Manufacture the Town of Boston ever had." In the Massachusetts towns a ship could be built of oak for $24 a ton, while in England, France, or the Netherlands an oak vessel cost $50 to $60 a ton, and even the fir vessels, built on the Baltic, inferior in strength and durability, cost $35 a ton. The colonies, therefore, could supply not only their own wants, but also could sell ships abroad; before the Revolution more than a third of British tonnage, it is said, was American built.

593. Extension of American shipping. — The colonists were as proficient in the sailing as in the building of ships, and carried on a large part of the ocean traffic which served the needs of American commerce. In the first year of the national government considerably more than half of the tonnage entering the ports of the United States from foreign countries was American, and English ships were the only serious competitors. The bulk of American shipping was engaged in the West India trade, but American ships carried also nearly half of the commerce between the United States and Europe, in spite of the adverse policy of European states, designed to exclude American ships from commerce with them and with their colonies. Driven further afield by this policy, American skippers began to seek commercial connections with more distant countries, from which wares had reached them hitherto only through middlemen. An American ship sailed for the first time to China in 1784; in 1788 two ships were advertised as loading at Boston for the Isle of France (Mauritius) and

India, and "anybody wishing to adventure to that part of the world may have an opportunity of sending goods on freight"; soon afterward a Philadelphia ship made the round voyage to China in less than a year. A vivid impression of the boldness and skill of American mariners of this period is given by the voyage of the *Experiment* to China. This boat, a sloop of eighty tons, no larger and no more seaworthy than the sloops which now bring bricks down the Hudson River to New York, carried her crew of fifteen men and boys safely to Canton and back, despite the perils of the sea and of pirates.

QUESTIONS AND TOPICS

1. Name another country in which transportation was easier in winter than in summer, before the introduction of railroads.

2. History of the navigation of the Connecticut River. [W. D. Love, Proc. Amer. Antiq. Society, April, 1903, reprinted Worcester, 1903.]

3. Write an essay on the economic, social, and political importance of the country store, in the past and present.

4. Write a biographical sketch of one of the business men named in section 582. [Poole's Index and continuations; current biographical dictionaries.]

5. What is now the interstate commerce of the State in which you live? To what States does it export its products, what products of other States does it import? How does its commerce with other States compare with its foreign commerce in bulk and value? [Ask questions of railroad and steamship men; visit freight yards.]

6. Comparing the figures of sect. 584 with the figures for total exports, sect. 561, what do you guess formed the bulk of the exports from each State or port?

7. Write a brief commercial history of one of the cities named. [Local histories; Encyc.; commercial cyclopedias.]

8. Episodes of Boston commerce. [M. A. D. Howe, Atlantic Monthly, 1903, 91: 175–184.]

9. Prepare and study a graphic chart, sect. 586, and preserve it for comparison with later conditions.

10. The African slave trade. [Weeden, chap. 12; Abbot, chap. 3.]

11. What reasons occur to you why the Americans should have traded with England so much more than with other states of Europe?

12. History of the commerce of the colonies with the West Indies. [Pitman; Weeden or Bruce, Index, West Indies.]

13. Character of production and commerce in the West Indies at this time. [Pitman; Fiske.]

14. History of ship-building in the colonies. [Weeden, 252–267, 573–581; Wright, 23–42; Marvin, chaps. 1, 2.]

15. Pirates and privateers of the colonial period. [Weeden, chap. 9, 559–565; Abbot, chap. 5, Howard Pyle, The buccaneers.]

BIBLIOGRAPHY

See preceding chapter.

CHAPTER XLVII

COMMERCE AND POLICY, 1789–1815

594. Importance of commercial policy in this period. — The two preceding chapters have described the conditions of commerce in the United States about 1789, with but an occasional reference to the influence which governments exercised in directing and restricting the movement of wares. In every period governments interfere with the free exchange of commodities, that the interests of the people as a whole may not suffer from the selfishness of individual merchants. In the period under consideration, lasting through the second war with England, the influence of governments on the fortunes of our foreign trade was more pronounced than it has ever been in later times; and the topic of commercial policy must occupy the leading place in this present chapter.

595. Questions of policy. — The Revolution of 1776, by which a group of English colonies was transformed into an independent state, claiming to rank as England's equal, shocked the ideas of European statesmen to an extent which we can hardly conceive. There was no place in the political system of the time for an independent American state. For centuries the states of Europe had been the sole source of active political and commercial power; in other continents were to be found only semi-civilized states, subject to European influence, and colonies, under the complete control of the mother countries. Each European state had regulated as it pleased the commercial relations of its colonies with the mother country, with other European countries, and with their colonies, Now that the United States had won its political independence, was it to be treated by England as though it was still an English colony, and given its former privileges though it was no longer subject to the former restrictions? Were other European states to welcome its commerce, now that England could no longer prevent, or were they to treat it like a European state, and restrict its trade with themselves and with their colonies? Finally, what attitude was the United States itself to adopt, now that it could frame its policy as it pleased? These were among the serious problems that perplexed the statesmen of the Old and New Worlds, as the success of the American Revolution became assured.

596. Policy of England. — Reference has been made in a previous paragraph to the striking fact that the colonists had no sooner won the war of independence than they returned to an active commerce with the country against which they had been fighting. Comparing the six years preceding the Revolution with the six years following the treaty of peace (1783), we find that the volume of trade between the United States and England was substantially the same. The American people suffered during the war for lack of the manufactures which they had been accustomed to purchase from England, and which they found then could be purchased to such advantage nowhere else; and as soon as peace permitted they began eagerly to buy English products again. For a moment it appeared that England was ready to welcome this trade; the English statesman, Pitt, introduced a bill which aimed to encourage the American trade not only with England but also with her colonies. Such a policy implied too serious a breach in the old system, and was not carried into effect. The Americans were, indeed, permitted and encouraged to trade still with England; that country could not afford to give up the growing market for its manufactures which the United States afforded. The ports of the West Indies, however, were closed to American merchants; the Americans were to be punished for their insubordination by exclusion from a branch of commerce which was to them of the first importance.

597. Policy of France and other states. — The Americans learned, not only from England but also from other European powers, that an independent state must shift for itself and could hope for no commercial favors. They might fairly suppose that the countries which had joined in their war against England (France, Spain, the Netherlands) would take advantage of the successful issue of the conflict to seek to secure the American trade which England had hitherto monopolized. They found, indeed, that these and other countries were willing to sell their goods to the United States; but still these countries were reluctant to take in exchange American wares for which they felt no special need, and were most reluctant to open the trade of their colonies to people of any nationality but their own. John Adams might say of France in 1780, "All the world will allow the flourishing state of her marine and commerce, and the decisive influence of her councils and negotiations, to be owing to her new connections with the United States"; whatever truth there might be in the statement, France certainly refused to express her gratitude by the grant of commercial privileges. France found, actually, that after the return of peace the Americans ceased to buy her manufactures, and flocked for trade to the English markets. French merchants complained that none of them ever gained in commerce with the United States: when all the best part of the American custom went to English merchants, why should France or any other country on the Continent relax the restrictions which were designed to protect the home market and the colonial market for the benefit of natives?

598. Conditions of American trade with Europe in 1789. — In spite of the unfavorable attitude of the powers which controlled the great markets of the world, the United States maintained a considerable commerce, as was shown by the descriptions of previous chapters. This commerce was, however, carried on under serious disadvantages. Reviewing the staple exports of the country we find that breadstuffs were generally subject to prohibitory duties in England, and that fish and salt provisions were actually prohibited in England, and were heavily dutied in France. The southern staples fared little better, for they competed with the products of European colonies even though they did not threaten European industries. Tobacco and rice were subject either to actual prohibitions or to heavy duties in most of the important European markets.

599. Conditions of trade with the West Indies. — Conditions of trade with the West Indies were even worse. Spain and Portugal absolutely forbade all direct intercourse with their colonial possessions; and wares destined for their colonies had either to be carried by smugglers or else exported to Europe and then re-exported in ships of the mother country. England closed her possessions on the American mainland completely, and while, as a temporary favor, she admitted some wares to her West India colonies, by proclamations renewed from year to year, she prohibited salt provisions and fish, and excluded American ships from the trade. Her vessels alone could take our produce and bring back the molasses, sugar, etc., which formed the objects of the return trade. The French West Indies, also, were open to us only as a temporary concession, and in them and in the colonial possessions of other powers the trade was burdened with duties.

600. Weakness of the United States at this time. — These were by no means all the hardships under which American commerce labored at this time. The government was too young and weak to furnish adequate protection to ships flying the American flag in foreign waters and on the high seas, and it had as yet obtained no guarantee that American fishermen would be allowed to pursue their calling as before the Revolution. Furthermore, the attention of American statesmen was distracted by the need of getting the machinery of the new government in running order, and by the serious fiscal difficulties which pressed for settlement. These were the dark days of American commerce. From the lofty position which the United States has reached to-day, courted for its commerce and its political influence by other great powers of the world, it is hard to realize how humble was our national position in 1789, and how precarious seemed our commercial future.

601. Survey of American commerce, 1789–1815. — Starting from these beginnings we have now to trace the course of our commerce through the period. So sharp were the fluctuations in this early stage that I give the annual statistics, and, for reasons which will be apparent later, call particular attention to the distinction between domestic exports, of articles produced in the United States, and foreign exports, of articles brought from some other country and re-exported. No exact figures for the imports of this period can be given, but it is safe to say that the value of the imports did not diverge greatly from the value of the exports.

Exports of the United States, in Millions of Dollars

(Fiscal years, ending Sept. 30 *of the date given)*

	Domestic	Foreign	Total		Domestic	Foreign	Total
1790	——	——	20.4	1804	41.4	36.2	77.6
1791	——	——	19.0	1805	42.3	53.1	95.5
1792	——	——	20.7	1806	41.2	60.2	101.5
1793	——	——	26.1	1807	48.6	59.6	108.3
1794	——	——	33.0	1808	9.4	12.9	22.4
1795	——	——	47.9	1809	31.4	20.7	52.2
1796	40.7	26.3	67.0	1810	42.3	24.3	66.7
1797	29.8	27.0	56.8	1811	45.2	16.0	61.3
1798	28.5	33.0	61.5	1812	30.0	8.4	38.5
1799	33.1	45.5	78.6	1813	25.0	2.8	27.8
1800	31.8	39.1	70.9	1814	6.7	0.1	6.9
1801	47.4	46.6	94.1	1815	45.9	6.5	52.5
1802	36.7	35.7	72.4	1816	64.7	17.1	81.9
1803	42.2	13.5	55.8	1817	68.3	19.3	87.6

602. Fluctuations in the export trade; share of domestic and of foreign exports. — If the reader will cast his eye down the column of totals he will appreciate at once the unsteadiness of our trade during the period under consideration. For a few years the figure of exports was almost constant. Then, in 1793, began a rapid rise; the export trade doubled, tripled, more than quadrupled. A check to this growth was apparent in the few years after 1801, but it began again, and the figures of exports reached their highest point in the years 1806 and 1807. They had grown more than fivefold in fifteen years. The year of 1808 showed a precipitous decline, and, after an interval of partial recovery, the figures reached their lowest point in 1814. At the close of the period prospects seemed brighter.

Returning to the table, to analyze the part borne in the changes by domestic and by foreign exports respectively, we find that the foreign exports were chiefly responsible for the great fluctuations. No figures can be given for the earlier years, but it can be stated with assurance that of the total exports in 1790 only an insignificant fraction, probably much less than one million, was composed of the products of other countries. There had been a tremendous gain, therefore, in this branch of our trade, before 1796, and it proved capable of great expansion afterwards, while, on the other hand, it declined in one year almost to nothing. Domestic exports, also, showed a great increase in the early years of the table, but they soon came near to the limit of their expansion, and hovered generally about the figure of forty millions; the table shows, moreover, that they resisted depressing influences better than the foreign exports.

603. Varying fortunes of foreign trade not explained by conditions at home. — The reasons for the growth of American trade after 1790 are to be sought mainly in conditions abroad. There was no development of resources at home sufficient to account for the great expansion of trade. The United States, it is true, gained a new export product in cotton, which was shipped in rapidly increasing quantities after the invention of the cotton-gin in 1793. Cotton took the first place among southern exports after 1800, and the extension of the cotton culture helps to explain the growth of domestic exports. Still cotton did not rise to the position of king among exports until the following period, and the description of the rise of the cotton trade will be referred to a later chapter.

We cannot give American statesmen the credit for removing the restrictions on our commerce, described above, and so enabling it to expand uncramped. In spite of all their persistence and ingenuity they secured only slight and partial concessions. The treaty with England, negotiated by John Jay in 1794, removed some of our grievances, but proposed to open the West India trade on such humiliating conditions that the offer was indignantly refused. A treaty with Spain gave us merely the right to navigate the lower Mississippi River, without other commercial privileges; and even the acquisition of Louisiana, in 1803, had but an inconsiderable effect on our commerce at the time.

604. Conditions abroad; effect of the European wars on domestic exports. — We owed our rapid commercial growth not to our own strength, and not to the favor of European states; we owed it to the necessities of the position in which the countries of Europe found themselves after the outbreak of the wars following the French Revolution. These wars were of decisive importance to our commerce in two ways. In the first place they caused an immense increase in the demand for our foodstuffs. When the states of Europe were fighting for their very existence they could not afford to uphold the principles of their former protective policy, and welcomed the means of subsistence, from whatever source they might come. The withdrawal of men from agriculture to serve in the armies diminished the supply of food in Europe and called for large exports from the United States, for which high prices were paid. Taking for illustration the little country of Portugal, we find that our exports to that country increased about tenfold in the course of the period, being especially large in the years from 1810 to 1813. These years mark the time when the Peninsular War was at its height, and when the large armies quartered in the country demanded a supply of food which could not possibly be met from native sources.

605. Effect on foreign exports and the carrying trade. — The European wars were not only responsible for a great gain in our domestic exports; they were the sole cause of the tremendous increase in the foreign exports, which figured so largely in our commerce at this period. The wars involved most of the important states of Europe. A ship flying the flag of France or of any other allies was constantly exposed to capture by British cruisers; a ship flying the flag of Great Britain or of one of her allies was a fair prize for the French privateers which swarmed over the seas. In the great conflict there was but one country, with an extensive merchant marine, which managed to maintain neutrality, and this was the United States. The carrying trade of the world fell into our hands. The countries of Europe, forced by the exigencies of war, gave up the cherished principles of their colonial policy, and threw open the trade with their colonies and themselves. The rights of neutral states in time of war were, it is true, still unsettled. American ship captains and merchants were subject to arbitrary and humiliating interference on the part of the belligerents. In the early part of the war, however, the results of this interference were of sentimental rather than of practical importance, and means were found to evade the restrictions which the belligerents imposed. When England forbade all trade between her enemies (France, Spain, the Netherlands) and their colonies, American skippers did not sail direct from the West Indies to Europe, but touched at some port of the United States, entered the cargo for import, and sometimes actually landed it. It was not meant for consumption in this country and was soon withdrawn and exported to its destination in Europe, as though it were composed of domestic products.

606. Prosperity of American commerce and shipping. — The European wars, therefore, introduced American commerce to a new era of prosperity. "No one was limited to any one branch of trade; the same individual was concerned in voyages to Asia, South America, the West Indies, and Europe." Our ships gathered the products of distant countries, coffee, sugar, tea, pepper, etc., and purveyed them to the people of Europe. In many years the value of foreign exports exceeded that of domestic exports; in 1806 it was half as large again. The reader will better appreciate the contrast with present conditions when he learns that in 1914 the foreign exports of the country amounted only to one sixty-seventh part of the domestic.

The merchant marine of the United States grew rapidly under these favoring conditions, and in spite of complaints that former conditions had been reversed, and that ships could be built cheaper abroad than at home. The national tonnage engaged in foreign trade, which in 1789 appeared to be not much in excess of 100,000, exceeded 500,000 in 1795, and 900,000 in 1810. The proportion of American ships in the total of those entering the ports of the United States grew correspondingly; and the merchant tonnage of the United States was second only to that of Great Britain and superior to that of any other country in the world.

607. Checks to prosperity after 1800. — The check on the growth of our commerce apparent in the figures for the few years after 1801 is explained by the conclusion of a peace between the states of Europe, which lasted from 1801 to 1803. Had the peace proved permanent there would have been, without doubt, a further decline in American commerce, as the European countries resumed their former commercial relations. With the reopening of war, however, the Americans enjoyed the advantages of their previous position; the exports of 1806 and 1807 exceeded a hundred millions in value, and marked a height which exports did not again reach for nearly twenty years. Our commercial prosperity at this time was very precarious. It was the period in which Napoleon and England were waging war over the Continental System, as described in a previous chapter. Each belligerent looked on the neutral carrier now not as a source of gain to itself so much as a source of help to the enemy, and determined to restrict neutral trade, even though it were necessary to destroy it. In the period between 1803 and 1812 some 1,500 American ships were seized in Europe, and the greater part of them condemned, for violating the restrictions then carried into effect. The best sailors were impressed from American ships to fight the battles of England. American shipping was involved in an unequal struggle.

608. Decline of commerce; embargo and war. — The United States was not prepared to enforce by arms the rights which it claimed for its merchants and sailors. The government shrank from war, and adopted instead the policy of commercial restriction, hoping to bring the European powers to terms by refusing to trade with them until they reformed their conduct. A short trial was made with an act forbidding the importation of English manufactures, and in December, 1807, a general embargo was laid on all vessels, forbidding them to leave port for a foreign country. The embargo was evaded in various ways, but its effect on our foreign commerce and export industries was disastrous, and forced the substitution of milder measures in February, 1809. Our commerce, now suffering both from the attacks of its enemies abroad and the restrictions of its friends at home, could not recover the position which it had reached before the embargo, and declined still further after the declaration of war with England, to which we were finally forced in June, 1812.

609. Effect of the decline of commerce on the development of American manufactures. — While the people maintained an active commerce with Europe they obtained most of their manufactured wares from that source, as they had done in colonial times. The interruptions of commerce due to acts like the embargo and to the war with England cut them off from this source of supply, and home manufactures grew up as commerce declined. The letters of Jefferson, written at this period, contain many references to the growth of manufactures in his State, Virginia, and in other parts of the country, especially in New England, the development of a native manufacturing industry was even more marked. American manufactures began, in this period, to outgrow the simple forms of domestic industry, and to attract the capital necessary for the establishment of regular factories. Many companies were incorporated to manufacture goods by means of power machinery, and industrial methods which had long been practised in England were now first introduced in this country on an extensive scale. The development of the textile industries was especially rapid. It was estimated that in 1800 the cotton factories of the country had consumed only 500 bales of raw material, while in 1810 the number had risen to 10,000 and in 1815 to 90,000. A cotton factory established by Francis C. Lowell at Waltham, Mass., in 1814, is said to have been the first in the world in which all the processes involved in the manufacture of goods, from the raw material to the finished product, were carried on in one establishment, under a carefully studied system.

610. Considerations determining early tariff policy. — The development of manufactures at this time gave rise, in the following period, to a demand for protection which marks a turning-point in the tariff history of the country. When the first national tariff was adopted, at the founding of the Federal government in 1789, the legislators had a difficult problem of policy to solve. They found the commerce of the country fenced in by foreign tariffs composed of high duties and of some actual prohibitions. They desired the reduction of these duties that American commerce might expand. Many of them expressed their belief in a policy of retaliation, if no other means availed to secure the reduction. At this time, however, the commercial position of the country was not strong enough to permit the tariff to be used as a weapon with which to menace foreign states. Other countries showed but a languid desire for the products which were then our staple exports, and we had great need of the foreign wares composing our imports. We could not afford even to discriminate against the importation of manufactured goods, with an idea of protecting native manufactures; our manufactures were then so weak that a policy of high protection, to exclude foreign wares, would have caused serious distress to the consumers at home.

611. Survey of tariff policy. — Barred by these considerations from a tariff of high duties, the legislators framed the first tariff mainly as a revenue measure. Comparatively few articles were placed upon the free list, duties being levied on articles like tea and coffee as well as on manufactured wares, which might possibly be produced at home. The general scale of duties was much lower than in foreign countries at the time, or in the United States later; it was estimated that an assorted cargo paid about 7½ per cent. Of the results of the first tariff a recent investigator says: "The most careful examination fails to show that it affected the volume, variety, or direction of our foreign trade in the slightest degree." In the course of the period the tariff was frequently amended, and rates were raised considerably; but the tariff continued to be used chiefly as a source of revenue, and was not seriously affected by protectionist ideas until after 1815.

QUESTIONS AND TOPICS

1. Prepare yourself for studying the policy of this period by mentally reviewing the present commercial policy. Does the government now encourage or discourage exports or imports? Does it grant favors to one foreign country over another? Do foreign countries prohibit or restrict trade with their dependencies? What is the present policy of this and other countries with respect to shipping?

2. When England excluded the United States from trade with the West Indies, what classes would be hurt, what classes would be helped, in England, in the West Indies, and in the United States?

3. Indicate on a rough sketch map the markets wholly or partially closed to American commerce about 1789.

4. Financial, military, and naval weakness of the United States in 1789. [Manuals and standard works on U. S. History.]

5. Make a chart first of the figures of total exports in sect. 601; then

indicate the relative share of foreign and domestic exports. Leave room at the top or bottom, where the dates are written, to write in the chief historical events affecting the course of commerce in the period.

6. It has been generally believed that the adoption of the Federal Constitution led to a great growth in business and prosperity. Prof. G. S. Callender has suggested that the growth of prosperity, due to influences acting from outside America, caused, on the contrary, the Constitution to be popular and successful. What facts support this latter view?

7. Prepare a list of the dates showing the beginning and spread of the European wars, and insert on the chart as suggested above.

8. Study the relative importance of foreign exports to total exports in the last half of the century, as a contrast to conditions about 1800. [U. S. Statistical Abstract, Index, Exports, merchandise, total values.]

9. Expansion of the merchant marine, 1789–1800. [Marvin, chap. 4.]

10. Grievances of neutral carriers, leading to the second war with England. [Marvin, chap. 7; Coman, 171–180; McMaster, Hist.]

11. The Embargo. [Manuals of U. S. history; references in Channing and Hart.]

12. Rise of manufacturing industry. [Coman, 180–193; Wright, 117–131.]

13. Considerations determining the earlier commercial policy. [Page; see above, chap. xlv.]

BIBLIOGRAPHY

See chapter xlv for general works; Henry Adams, * History, N. Y., 1889–91, covering the period 1800–1817 in nine volumes, is the most complete general narrative. Mahan, ** War of 1812, Boston, Little, 2 vols., is now by far the best special account. Ralph D. Paine, The fight for a free sea, New Haven, 1920, is an interesting description. The commercial statistics of the period may be found elaborated in Adam Seybert, * Statistical annals, Phila., 1818, or in Timothy Pitkin, * Statistical view, New Haven, 1817, 2d ed., 1835

CHAPTER XLVIII

NATIONAL EXPANSION, 1815–1860

612. Survey of commerce, 1815–1860. — In contrast with the period ending in 1815, the next period which we study, extending from 1815 to 1860, was marked by the slowness and the comparative steadiness in the growth of foreign commerce. An indication of the course of trade in this period is given by the following table, in which the figures represent millions of dollars

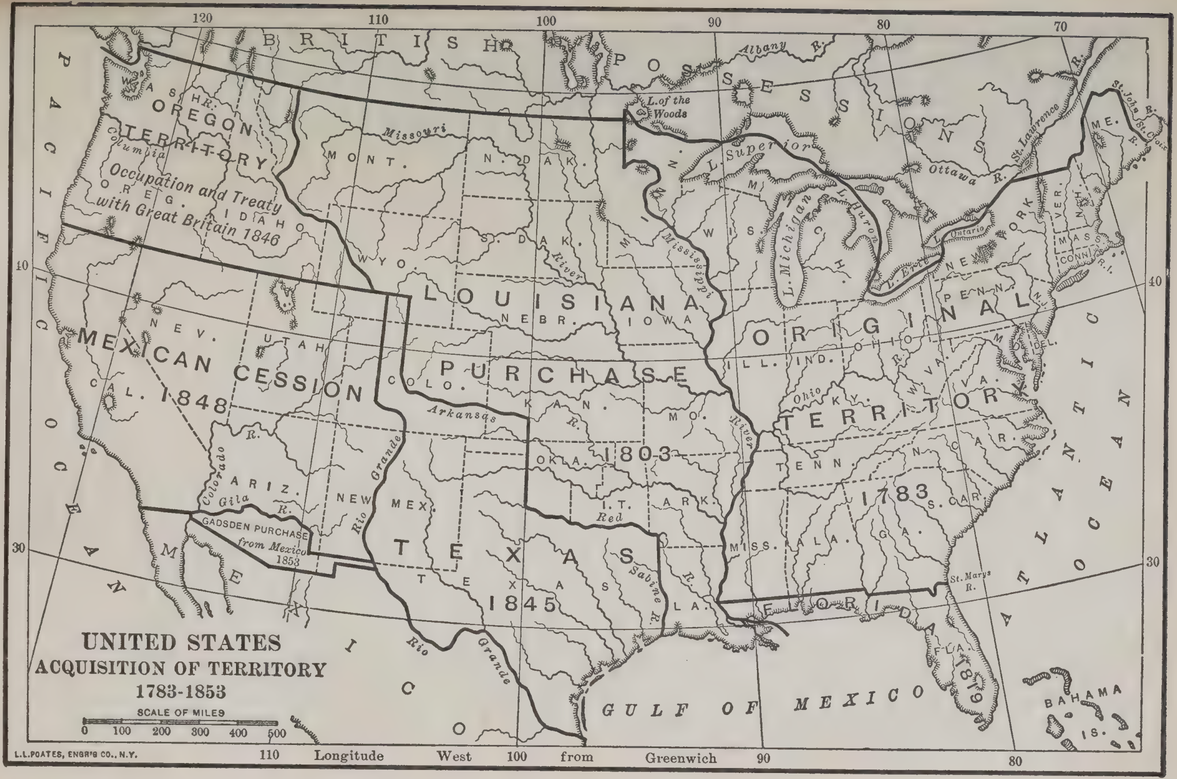
	Imports	Exports	Total
1820	74	69	144
1830	62	71	134
1840	98	123	221
1850	173	144	317
1860	353	333	687

Though the statistics of selected years can give only a rough picture of commercial development, the figures here given suggest the striking features of our trade in this period with sufficient accuracy. For about twenty years after 1815 the foreign commerce of the country was nearly stationary, or actually declined. Not until 1835 did our exports reach again the mark attained in the year 1807. Towards the end of the period, however, they showed increasing strength; the figures for 1860 show the upper limit which they attained, but for some years previously they had been approaching the sum of three hundred millions.

613. Reasons for slowness of growth. — The reasons for these changes in our foreign trade must be sought both abroad and at home. Our prosperity in the preceding period had been due mainly to the European wars. With the return of peace the states of Europe escaped from their commercial dependence on the United States. Our domestic exports of breadstuffs and provisions declined as Europe returned to the policy of protecting the domestic food supply; and our foreign exports declined even more rapidly when we lost our privileged position of the great neutral carrier, and our merchants had to face not only the active competition but also the adverse legislation of other countries. Through most of the period the annual foreign exports of the country were about twenty million dollars in value. Not until near the end of the period did conditions change to our advantage. The repeal of the English Corn Laws in 1846, as was noted in a previous chapter, marked a departure in commercial policy, which offered new openings to American export industries.

614. Absorption of the national energy in territorial expansion. — At home, moreover, the people of the United States were occupied in this period with tasks which turned their thoughts and interests to a large extent away from foreign trade. It was a period of great territorial expansion. A comparison of maps indicating the distribution of population shows that extraordinary changes occurred in the interval between 1810 and 1860. At the former date the people were still gathered mainly along the Atlantic seaboard, face to face with Europe; and most of the territory west of the Appalachian mountains was still left to the Indians. The center of population was not far from Washington, D. C. In 1860, on the other hand, the center of population was near Chillicothe, Ohio. This change indicates an enormous movement of population westward. The country extending west to the Mississippi river had, by 1860, been covered almost continuously with settlements; many people had spread out on the great plains facing the Rocky Mountains; and the population on the Pacific Coast was sufficient to entitle that district to the two States California and Oregon.

615. Relative decline in the importance of foreign trade. — The expansion of population, necessary as it was to the development of the country, proved in its early stages to contribute



UNITED STATES

ACQUISITION OF TERRITORY

1783-1853

comparatively little to the growth of foreign commerce. The growth of our trade did not keep pace with the growth of population. While the share of the average inhabitant in foreign trade was over $30 in 1800, it was little over $20 in 1860, and ranged between $10 and $15 through much of the intervening period.

It seems as if the people of the country, after the close of the war of 1812, had turned their gaze away from Europe, the continent which they had for centuries regarded as the source of civilization, and had fixed their attention on their own continent, with the determination to make its resources satisfy their needs, so far as they were able. Many of the settlers in the western country led lives of extreme simplicity, unable to find a market for the surplus which the fertile soil returned to them, and consequently forced to restrict their purchases of foreign goods to the bare minimum.

616. Importance of the problem of transportation in this period. — As the American people expanded and occupied territory far beyond the limits of their original settlements, the question of transportation became one of increasing importance. The early colonists had evaded rather than solved the problem of transportation, by choosing for settlement districts connected with the sea by short water routes, and by renouncing, in large part, the attempt at intercommunication by land. The problem could no longer be set aside, as the people spread out in the great interior valley. The resources of the West could be of no advantage to the people of the East, and could contribute nothing to the foreign commerce of the country, unless means were found to bring the wares to market with a profit.

In the remaining sections of this chapter, therefore, we shall study the development of the means of transportation in this period, that we may be better able to appreciate the details of the export and import trade, described in following chapters.

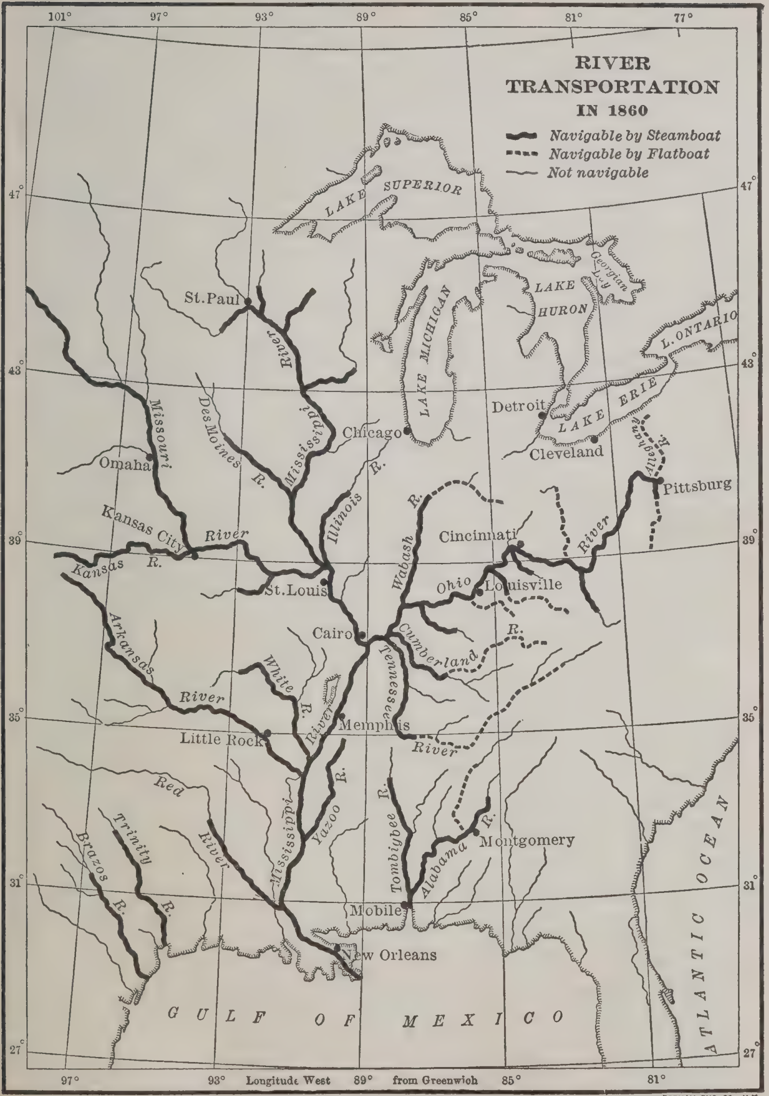
617. The turnpike era. — Even in the earlier period, following 1789, the condition of the common roads was felt to be intolerable, and a movement for their reform set in. Stock companies were chartered, to improve the more important roads, and were allowed to secure a return on their investment by charging toll on traffic — so much for a one-horse cart, so much for a two-horse wagon, etc. Hundreds of turnpike companies were chartered in the different States, and in Pennsylvania alone over 2,000 miles of improved roads had been constructed by them at the close of the first quarter of the century.

Until better means of transportation were provided the turnpikes were important channels of trade. They united the districts of the interior with the coast and with navigable rivers, and made possible throughout the year a freight traffic which formerly had been restricted to the sleighing season. A great highway, like the Mohawk and Hudson turnpike, running from Schenectady to Albany, was studded so thickly with taverns that the traveler was never out of sight of the swinging sign-boards.

618. Failure of the turnpikes to meet the country's demands. — The success of the turnpikes stimulated the national government to construct a road from Cumberland, on the Potomac River in the western part of Maryland, to Wheeling on the Ohio River. This road was designed to furnish the connection, that was so keenly desired, between the districts lying on either side of the mountains; and was for many years an important route for passenger travel. The expense of wagon transportation, however, prevented a great growth of freight traffic on this or on other land routes of considerable length. The cost of moving freight over the roads of this period has been estimated roughly at ten cents per ton-mile, and this cost prohibited the movement of ordinary freight to a great distance. The turnpike, therefore, did not solve the problem of transportation for the country, and turnpikes declined as better means of transportation were brought into use. About the middle of the century the idea of building roads of wood took strong hold of the minds of men, and plank roads were constructed with great vigor for a few years; but the idea proved impracticable and led to no important results.

619. Importance of the western waterways.—Vastly more important in its effects on the internal and foreign commerce of the country was the development of the means of water transportation. It has been said of North America that no other continent, with perhaps the exception of South America, offers such excellent natural facilities for intercommunication as is furnished by the system of rivers and lakes lying east of the Rocky Mountains. Early in the history of our western settlements traders used the rivers flowing into the Mississippi to secure connection with the market at New Orleans, then under Spanish rule; and the Louisiana purchase of 1803 gave the United States control of the river route from source to mouth. A line of packet boats plying between Pittsburg and Cincinnati was started in 1794, and many flatboats were employed to float cargoes down the Mississippi. The swift current of that river, however, made ascending navigation difficult. The crews of the flatboats had to return home by land, going generally on foot through nearly a thousand miles of wilderness, and using about six months on the round trip. The stream could be ascended only in small boats propelled by poles and sails. Though the freight rate down the river was as low as one cent per ton-mile, the charge in the other direction was about six times as much. The need of some better means of propelling boats against the current was strongly felt; and long before the steamboat had been made a practical success the prediction was common that it would be developed to serve the needs of commerce on our western rivers.

620. Invention and application of the steamboat. — The steamboat, like many other instruments of technical progress, was not the invention of a single man, but was developed by contributions from several different sources. Before the adoption of the Federal Constitution (1789) Fitch and Rumsey had constructed steamboats which maintained a speed of four to seven miles an hour against the current of the Potomac and



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Delaware rivers; and these successful experiments were followed by many others in this country and in Europe. Robert Fulton, therefore, scarcely deserves the credit commonly accorded him for invention, but his service was not the less important. He combined the ideas and inventions of others, and transferred the steamboat from the sphere of technical experiment to that of practical business operation. The Clermont, which started from New York August 7, 1807, and arrived in Albany, 150 miles distant, in 32 hours, was the first steamboat in the world which maintained a regular and continuous traffic in the public service.

621. Development of river transportation. — Within a few years of Fulton's success steamboats were introduced on the western rivers, and after an interval of trial proved their capacity for meeting the conditions. In ten years (1817) a steamboat made the trip from New Orleans to Louisville in 25 days instead of the three months consumed by barges; after another ten years (1827) a steamboat made the trip in little over a week. The steamboats did more at first to reduce the time of voyages than to reduce the rates of transportation, but the cost of carriage declined gradually as the means of transportation were improved. The following figures, giving the number of steamboats employed on the rivers of the West, show how rapidly steam navigation increased in importance: 1818, 20; 1829, 200; 1842, 450; 1848, 1,200. Size and carrying capacity were growing also, and it is said that in 1847 the steam tonnage of the Mississippi Valley exceeded that of the whole British Empire. "Pittsburg city, the Pennsylvania great western emporium," as it was styled in a book published in 1830, grew great by steamer traffic, and other cities, as Cincinnati, Louisville, and St. Louis, flourished under the same influence. The most obvious effect of the extension of steam navigation was the growth of internal trade, especially that between North and South. This trade, however, was indirectly of great importance to our foreign commerce, for it enabled the people of the South to apply themselves almost exclusively to the growth of export products, like cotton, relying on other parts of the country for food and manufactures.

622. Demand for canals in this period. — While the river system offered great opportunities for developing the resources of the West, it was necessarily incomplete in the connections it afforded with other parts of the country. It left gaps, to be filled by other means of transportation, between three important sections of country, drained respectively by the Mississippi and its tributaries, by the Great Lakes, and by the rivers flowing into the Atlantic. The need of bridging these gaps in the transportation system was felt acutely in the second quarter of the century, as population spread in the interior of the country, and was first met, with some degree of adequacy, by the construction of canals.

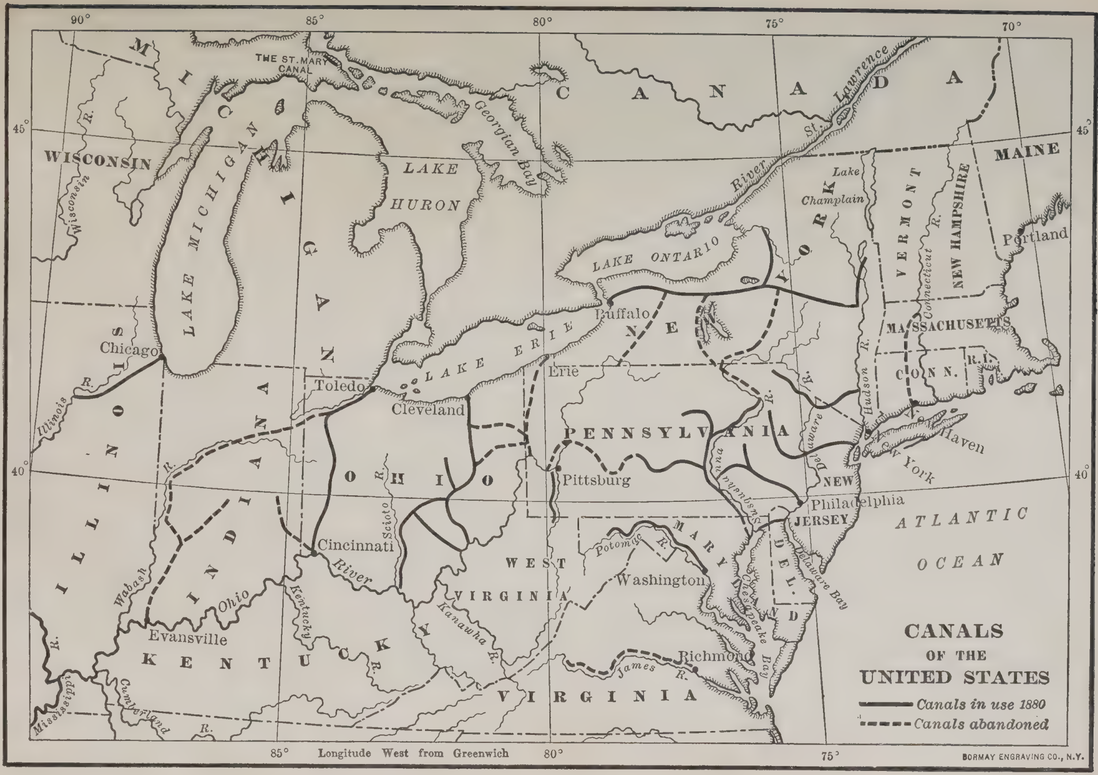
There had been many projects for canals in the colonial period, and some short stretches were constructed before 1800. People contented themselves in general, however, with the natural waterways, and sought merely to regulate their channels and to regulate the flow of water by means of dams. The era of activity in canal construction began after the close of the second war with England, in 1815.

623. The Erie Canal (1825), and others. — The easiest route by which a canal might be carried through the Appalachian mountain ridge lay in the State of New York, along the valley of the Mohawk River. The advantages of this route were recognized in the colonial period, and the advisability of utilizing them was felt especially during and after the war of 1812, when the political danger of leaving the country without means of intercommunication became apparent. The construction of a canal along this route was begun in 1817, and in 1825 the first boat passed from Lake Erie to the Hudson River. Other canals were constructed to connect Lake Champlain and Lake Ontario with the Erie Canal, and further south, in New Jersey and Pennsylvania especially, the people entered actively into the work of canal building.

Further west, canals were constructed to unite Lake Erie with the Ohio River, and Lake Michigan with the Mississippi River (1848), and just before the close of the period which we are studying the St. Mary's Falls Canal (1855) opened the passage from Lake Superior to the other lakes to boats with a draft of twelve feet.

624. Commercial benefit of the canals. — The canals effected a reduction in transportation charges which placed trade on an entirely new footing along the lines that they covered. In contrast with the cost of ten cents per ton-mile, on the turnpikes, we find a cost of movement of about one cent, and tolls which brought the total charge to about three cents. The tolls varied on different articles and were not the same on different canals, but the total charges represented a great saving in transportation even in the early days of the canals, and tended to grow less with the passage of time. The crops which grew in abundance on the fertile lands of western New York had gone begging before the construction of the Erie Canal, and the inhabitants had been able to purchase few manufactured or foreign articles. A letter from the Genesee country (east of Buffalo), written in 1799, said that grain was so low in price as to be scarcely worth the raising, while European goods were very dear; it took the produce of one acre to buy a pair of breeches. Conditions had improved somewhat before 1825, with the extension of turnpikes and with the increase in the navigation of the Susquehanna River, but the Erie Canal brought nevertheless a new era of prosperity to this district, and first made its rich resources available for consumption in the New York market and for extensive export.

625. Canals less important than rivers for distant shipments. — Important as were the canals, their influence in this period was local rather than national. Managers were slow to adopt the practice of reducing rates on a long haul, to stimulate distant traffic, and the canals served mainly local needs. We read, it is true, of cotton being carried from Alabama to Philadelphia by canal, and of wheat reaching New York over the Erie route from Ohio and Indiana. It is noteworthy, how-



CANALS OF THE UNITED STATES

ever, that even in 1840 only one seventh of the freight carried on New York canals came from outside the State. The river system of the Mississippi proved still to be the most valuable outlets for the products of the great interior valley, and about 1850 the value of the wares which it carried to the coast was double that reaching the seaboard by the Hudson River and its canals. A line drawn east and west through the center of Ohio marked the commercial watershed between the competing routes; north of that line practically all goods were shipped by lake and canal, while south of it only articles like tobacco, wool, and manufactured wares were sent by that route, and most products were shipped by way of the Mississippi. Indiana and Illinois showed a still more decided tendency to the river route. In the reverse direction, however, the northern route, by canal and lake, had the advantage, and the movement to the interior by this route was double that ascending the Mississippi.

626. Demand for further improvement met by railroads. — Reviewing the substance of preceding sections, we find that of the new means of transportation adopted to develop the resources of the country and to make them available in internal trade and foreign commerce, none had yet proved adequate to meet the conditions. Transportation on the turnpikes was too expensive to permit the carriage of bulky freight over great distances. River navigation, valuable as it was in opening the interior to commerce, still was tied fast to channels cut by nature; the rivers must at least be supplemented by feeders and by connections across the country. Canals were of great service as supplements to the rivers, but they too, were restricted in their course by the conditions set by nature, and, like the rivers, could be used in northern districts during only part of the year. What the country needed was a means of transportation available throughout the year, free to follow the paths toward which the interests of merchants most inclined, and cheap enough to encourage the exchange of common articles between points widely separated. The need was met, in the course of time, by the development of railroads.

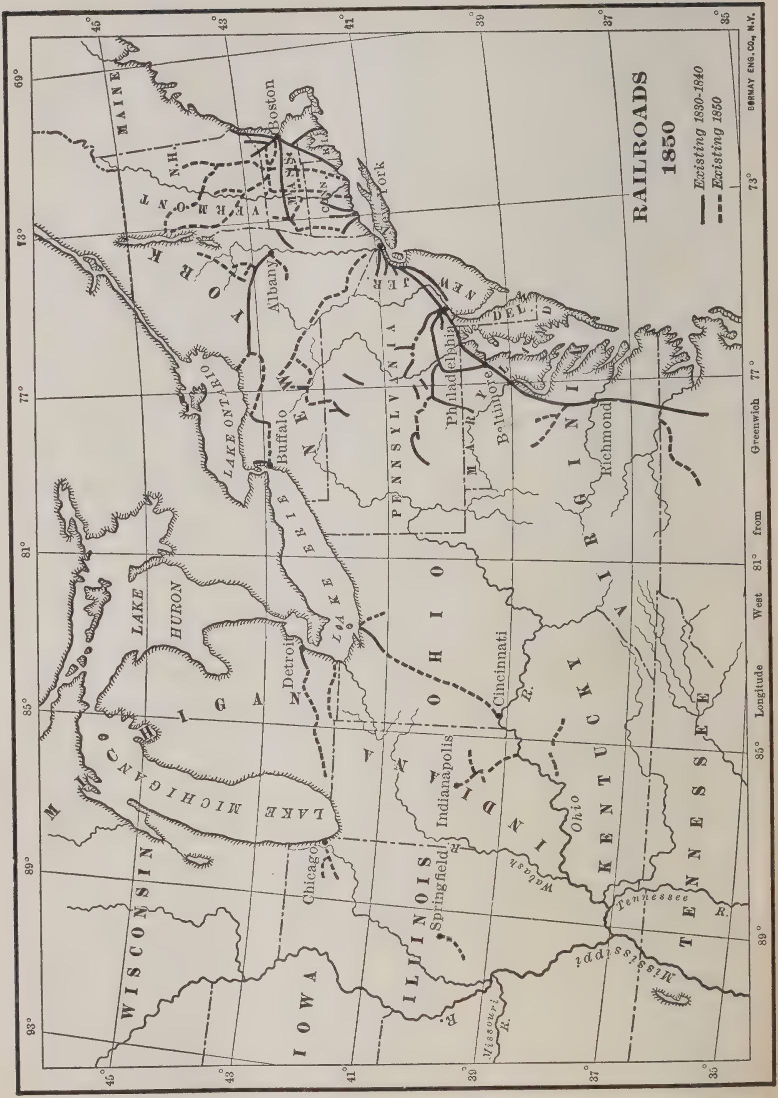
627. Early American railroads little used for freight traffic. — The operation of steam railroads began in this country and in England at almost the same time; the Baltimore and Ohio railroad was in course of construction in 1830, when the Liverpool and Manchester line was opened. In this early period, however, the railroad was a much more valuable instrument in the Old World than in the New. In England and other European countries the railroad found great manufacturing and shipping centers already established, with large volumes of valuable freight to be carried short distances; the task before it was comparatively easy. Conditions were somewhat similar along our eastern seaboard, but in the United States in general the railroad was wanted to develop agricultural districts with a comparatively sparse population, separated from industrial and shipping centers by hundreds of miles. The traffic offered by these districts could not bear the high charges imposed by railroads in their early period; these charges greatly exceeded those paid for canal transportation and seem in some cases to have equaled those paid for carriage on turnpikes. Aside from coal and cotton the early American railroads carried comparatively little freight; and they played but a slight part in the development of commerce.

628. Extension of the railroad system in the West after 1850. — In 1850 there were still few railroads west of the Alleghany Mountains. In contrast with nearly seven thousand miles of line in the States along the eastern coast the States of the upper Mississippi Valley could show little over one thousand. Not a mile of railroad had been built in Iowa and Minnesota, and there was no railroad connection with the East in all the country west of the Mississippi and north of the State of Missouri.

Conditions were ready at last for the extension of the railroad system through the interior of the country and the West saw many thousand miles of line constructed in its territory in the decade ending in 1860. The New York Central, the Erie, the Pennsylvania, the Baltimore and Ohio, and other lines united the roads of the interior with the East; many roads were built from Lakes Erie and Michigan to the Ohio and Mississippi rivers; while another set of roads extended north from the Gulf of Mexico, aiming to attract the traffic of the great valley southwards.

629. Effect of the improvements in transportation, especially marked in the following period. — The commerce of the country got the full benefit of the railroad system only after 1860, when various improvements led to a great reduction in freight rates, and stimulated an immense increase of traffic. The period before the Civil War must be regarded as one of preparation for the great commercial expansion in the period following; the lines were laid, in large part, but men had not learned to make the best use of them. Even before 1860, however, the railroad had become an indispensable instrument to the commerce of the country. While it did not displace other means of transportation, it forced them to improvement, and gave service in forms which they could not supply. There will be little space in the two following chapters to refer to the development of the means of transportation described here, but the student must bear in mind this factor, as contributing always and in very important measure to the growth of the country's commerce. We may close this summary of the subject by giving an illustration of the effect of transportation on the value of the resources of Ohio; the price of farm produce in that State rose 50 per cent after the completion of the canals, while the railroads appear to have doubled the price of flour, trebled the price of pork, and quadrupled the price of corn.

630. Prosperity of the American merchant marine. — The period from 1815 to 1860, in which the country first grappled successfully with the problem of internal transportation, was also the period in which the American merchant marine reached the pitch of its prosperity. Even after the conclusion of peace in Europe in 1815, which subjected our ships again to the competition of foreign carriers and to the restrictions of other countries, American ship-builders and sailors were able to hold


RAILROADS
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Existing 1830-1840
Existing 1850
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Longitude West from Greenwich
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VERMONT
MASS.
CONN.
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NEW YORK
NEW JER
PENNSYLVANIA
DEL.
MARYLAND
VIRGINIA
OHIO
INDIANA
ILLINOIS
MICHIGAN
WISCONSIN
IOWA
KENTUCKY
TENNESSEE
LAKE ONTARIO
LAKE ERIE
LAKE HURON
LAKE MICHIGAN
Boston
New York
Albany
Buffalo
Philadelphia
Baltimore
Richmond
Cincinnati
Detroit
Chicago
Indianapolis
Springfield
Ohio
Wabash R.
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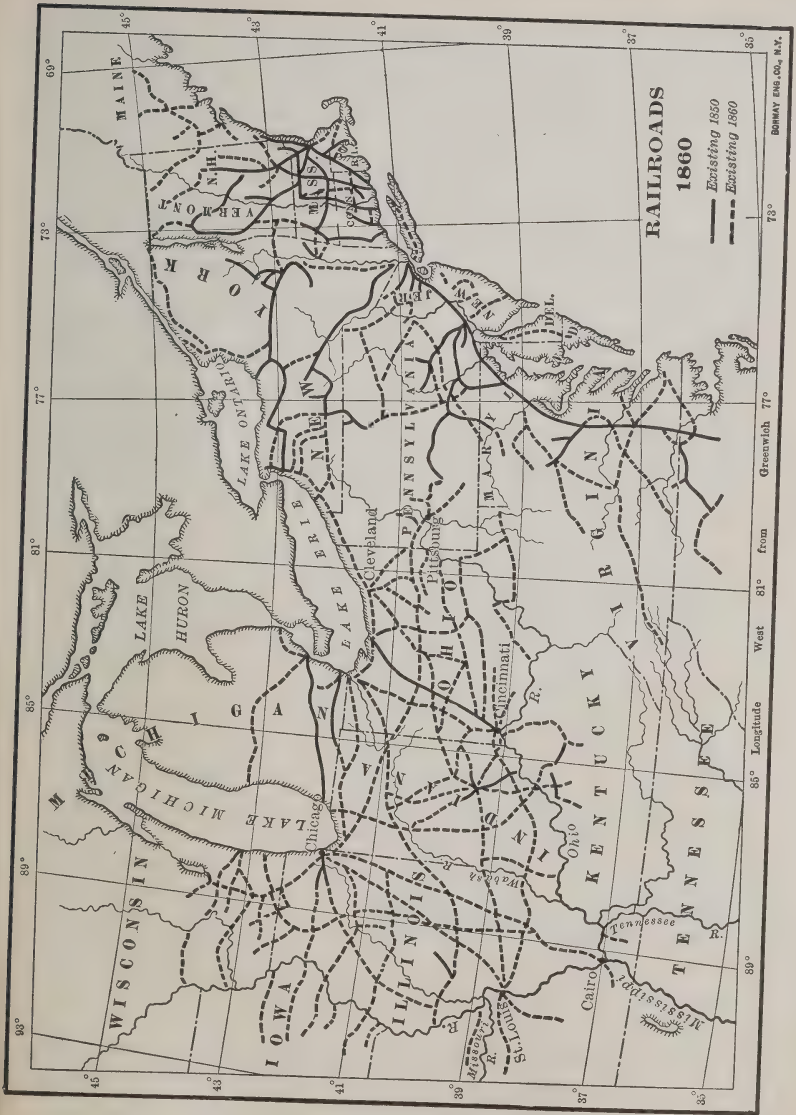
RAILROADS
1860
Existing 1850
Existing 1860
BORMAY ENG. CO., N.Y.
Longitude West from Greenwich
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NEW YORK
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their own; and the period is marked by a great increase in our merchant tonnage. Down to about 1850 the wooden sailing ship was still supreme in its control of the ocean carrying trade. American builders developed the ship to its highest type, the clipper, and led the world in the art of naval construction. Their skill, and the cheapness of good ship timber, more than offset the higher prices which the tariff forced them to pay for materials and equipment such as iron, copper, cordage, and sail-cloth. The officers and crews of American vessels enjoyed an international reputation for their efficiency.

631. Position and prospects of the merchant marine in 1860. — In 1855 the tonnage built in the United States was greater than ever before or since; the California gold discoveries had caused a great increase in the demand for transportation to the Pacific Coast, from which the government excluded foreign vessels, and the Crimean War forced European governments to charter many American vessels for transport service. At the close of the period (1861) the tonnage of the United States, including that engaged in domestic trade, was not far from one third of the total tonnage of the world; the British Empire had slightly over one third; and the tonnage of all other countries grouped together was but little more than our own. Our merchant fleet exceeded by half the amount necessary for the carriage of all our exports and imports, and earned a large revenue from the foreign countries which sought its service.

In one important point, however, the prospects of the American merchant marine were not bright. We were not keeping pace with the peoples of Europe in the construction of steamers for ocean service, and of iron vessels in general. American steamers were not able to win a place of any importance in the foreign carrying trade; and before 1860 a slackening of activity in the building of wooden sailing ships was noticeable.

632. Navigation policy: reforms and restrictions. — The period was marked by the removal of many of the restrictions on foreign shipping which had been a regular feature of government policy in previous centuries. Our ships were burdened at first by heavy dues or by prohibitions in foreign ports, and it was but natural that our government retaliated by taxing foreign ships entering our ports. The disadvantages of this system became apparent as commerce grew in the nineteenth century, and a series of reciprocity treaties removed the former discrimination, and put the ships of all nations on substantially the same footing. The United States held fast, however, to certain features of the old navigation policy. The coastwise trade, which was interpreted to include the trade to the Pacific coast by way of the Isthmus of Panama or around Cape Horn, was reserved absolutely to American vessels; and no vessel could secure American registry unless it had been built in this country. Ships built abroad could not sail under the American flag even though they had been purchased and were owned by citizens of the United States.

QUESTIONS AND TOPICS

1. Prepare a chart, sect. 612. [Figures of commerce for the intervening years, showing fluctuations, will be found in the U. S. Statistical Abstract.]

2. Review, in previous chapters, the accounts of the commercial policy of European states during this period.

3. The westward movement of population. [Manuals of U. S. history; maps in Atlas of the Census.]

4. The population of the country was as follows, in round millions (counting half a million or over as one): 1790, 4; 1800, 5; 1810, 7; 1820; 10; 1830, 13; 1840, 17; 1850, 23; 1860, 31. Determine the average commerce per capita, and indicate it on the chart.

5. The commercial history of a western town. [Select a town in one of the States of the Mississippi Valley, admitted during this period, and determine, from local histories and biographies, the extent of its trade with other parts of the country and with foreign countries.]

6. What towns of the colonial period were situated at a distance from the sea? What towns grew to considerable size in the interior of the country in this period, and what were their means of land or water transportation? [Consult historical maps, as those in Hart's Epochs of American History.]

7. (*a*) Write a report on the history of turnpikes in the State in which

you live. [Consult State and local histories, making full use of table of contents and index.]

(*b*) Development of roads in the U. S. [Hulbert, vol. 11, chap. 1.]

(*c*) The Pennsylvania State Road in 1796. [Hulbert, vol. 11, chap. 2.]

(*d*) The Catskill turnpike. [Hulbert, vol. 12, chap. 6.]

8. The Cumberland Road. [Hulbert, vol. 10; see especially chap. 4, stages and freight traffic.]

9. What are the chief river systems of the country; what gaps exist between them? How do the facilities for river transportation in different countries of Europe compare with those of the United States?

10. Development ot the boats used for river traffic. [Hulbert, vol. 9, chap. 4.]

11. Character and life of the western river men. [Same, chap. 5.]

12. The invention of the steamboat. [Encyclopedias; U. S. histories; Thurston's Fulton, N. Y., 1891; S. Bullock in Conn. Magazine, 1905, 9: 440–455, an excellent article with illustrations.]

13. Write a report on the influence of the steamboat in building up one of the cities named. [Local histories.]

14. Early canal projects. [Hulbert, vol. 13, chaps. 2, 3.]

15. The Mohawk River route. [Hulbert, vol. 14, chap. 1.]

16. Early projects for a canal in the Mohawk Valley. [Same, chap. 2.]

17. The Erie Canal. [Same, chap. 4.]

18. Economic effects of the Erie Canal. [Hulbert, vol. 14, chap. 5.]

19. Origin of American railroads. [Johnson, chap. 2.]

20. Did any European country present conditions like those of the U. S., in respect to railroad development? What has been the history of railroads in Russia? [See chap. 44.]

21. Growth of the American railroad system. [Johnson, chap. 3; Hadley, chap. 2; Coman, 234–242.]

22. Because the Ohio farmer received more for his products, does it follow that railroads have raised the price of articles and forced consumers to pay more for them?

23. Development of the merchant marine, 1815–1860. [Marvin, chaps. 9, 11, 12; Abbot, chaps. 1, 2.]

24. American whalers. [Marvin, chap. 8.]

25. Navigation laws of the U. S.: history and criticism. [Wells, Merch. marine; Carnegie History, chap. 39.]

BIBLIOGRAPHY

See chapter xlv for general works.

Special Accounts. — Worthy P. Sterns, ** Foreign trade of U. S. from 1820 to 1840, Jour. Pol. Econ., Chicago, Dec., 1899, 8: 34–57, 452–

490; J. McGregor, * Commercial statistics; J. S. Homans, * Cyclopedia; J. D. B. DeBow, * Industrial resources.

Special Topics. — Hulbert, Historic highways, and more briefly in The paths of inland commerce, New Haven, 1920; E. R. Johnson, Amer. railway, (with references); A. T. Hadley, Railroad trans.; C. F. Adams, Jr., Railroads; U. B. Phillips, History of transportation in the eastern cotton belt to 1860, N. Y., 1908. Shipping: Samuel E. Morison, ** Maritime history of Massachusetts, 1783–1860, Boston, 1921; R. D. Paine, * The old merchant marine, New Haven, 1920; A. H. Clark, The clipper ship era, 1843–1869, N. Y., 1910; A. T. Verrill, The real story of the whaler, N. Y., 1916; John H. Morison, History of American steam navigation, N. Y., 1903. River navigation: H. W. Dickinson, Robert Fulton, London, 1913; D. L. Buckman, Old steamboat days, N. Y., 1907; W. E. Verplanck and M. W. Collyer, The sloops of the Hudson, N. Y., 1908; H. M. Chittenden, History of early steamboat navigation on the Missouri River, N. Y., 1903. Canals: H. W. Hill, Historical review of waterways and canal construction in New York State, Buffalo, 1908, (Buffalo Hist. Soc., vol. 12); N. E. Whitford, History of the canal system of the State of New York, Albany, 1906, 2 vol., (Supplement to Rep. of State Engineer for 1904–05); E. J. Benton, The Wabash trade route in the development of the Old Northwest, Baltimore, 1903. The West: K. Coman, ** Economic beginnings of the Far West, 2 vol., N. Y., 1912; R. G. Thwaites, The fur trade in Wisconsin, 1812–1825, Madison, Wisc., 1912; I. Lippincott, History of manufactures in the Ohio valley to 1860, N. Y., 1914.

CHAPTER XLIX

EXPORTS, 1815–1860

633. Chief exports in 1860. — The following table gives the chief items among the exports of the country in 1860, and corresponding items made up from the annual average of the years 1802–1804, as a basis from which to appreciate the changes.

Exports of U. S., Millions of Dollars

	1802–4	1860
Vegetable foods	13	27
Cotton	6	191
Tobacco	6	15
Animal products	3	20
Fish products	2	4
Forest products	4	13
Manufactures	2	37
Total of these items, omitting decimals	36	307
Total domestic exports including items omitted	39	316
Total foreign exports	28	26
Exports of precious metals		56

634. Changes since 1800. — It will be noted, as said above, that the foreign exports of the country did not increase during the period, and were actually less in 1860 than they were about 1800. Comparing the figures for the total exports of domestic merchandise we find that this, the most important branch of our commerce, increased about eightfold in value between the years chosen for comparison. All of the separate classes of wares contributed to the growth of our export trade, but in very different measure, as is apparent when the figures are compared. The export industries which were most prominent in the colonial and early national periods had not kept their place in the movement of progress, and their output for export had merely doubled, roughly, in this period. There is apparent, on the other hand, a great growth in the export of manufactured wares; and the export of cotton, which in 1789 was practically nothing, and about 1800 was less than seven million, had risen to the enormous sum of one hundred and ninety million, considerably more than half in value of the total exports of the country. The history of commerce presents no parallel to the rapid rise of cotton in the commerce of the United States at this period, and the subject demands careful consideration.

635. Cotton before 1800. — The word cotton, now applied exclusively to the fibers attached to the seed of a shrub of the mallow family, was formerly a general term used for vegetable fibers coming from several different sources. The fibers acquired from the present cotton shrub, or from a vine or tree, had been used for textile fabrics from ancient times. The manufacture of cotton goods, however, was neglected in Europe until the eighteenth century, and at the beginning of our national existence much of the supply of raw cotton still came from the ancient seat of the cotton industry in Asia. From almost the beginning of the colonial period in American history experiments had been made with cotton culture, but the colonists found no incentive to devote themselves to cotton cultivation on a large scale. The separation of the fiber from the seeds was a tedious process, there was no market for raw cotton in the colonies, and other crops were found to return larger profits to the cultivator. Cotton was grown successfully on some of the islands of semi-tropical America, but the territory now forming the United States counted for nothing as a source of cotton when the national government was established in 1789. So weak, in fact, was the cotton industry at this time, that it was protected by a duty of three cents a pound on imported cotton, included in the first national tariff.

636. Growth in importance of cotton. — Various influences, however, combined about 1789 to bring into prominence the possibilities of cotton as a regular crop. The great improvements in textile machinery caused at this time an increased demand for the raw material. The other crops which were then raised in the territory now occupied by cotton were not flourishing. The indigo culture, for reasons which have been noted above, was unpopular; rice culture had declined during the Revolution, as the war had broken up the organization of slave labor in the rice districts; tobacco was giving smaller returns, as the land was exhausted by continuous cropping. A new variety of cotton, moreover, had recently been introduced from the Bahamas, known as sea-island or long-staple; the fibers were long and silky, suited to the manufacture of fine threads and fabrics, and they were more readily separated from the seeds than were the fibers of the ordinary short-staple or upland variety. The cultivation of this variety was an assured success in the narrow strip along the coast where it could be grown; and further inland, where sea-island cotton could not be raised, people began to strive persistently to overcome the difficulties of the cultivation of the upland variety.

637. Demand for efficient means of cleaning cotton. — The chief obstacle to the cultivation of upland cotton was now the difficulty of separating the fibers from the seeds. To perform the process by hand-picking was out of the question, as a man in this way could clean only one pound of cotton in a day. Various simple machines had been devised to effect the separation of the seeds, and these were fairly successful when applied to sea-island cotton, enabling a man to clean fifty or sixty pounds. None of them, however, was a success when applied to upland cotton, whose short fibers adhered very tenaciously to the seeds.

The problem was solved by a native of New England, Eli

Whitney, who had gone south as a teacher, and who invented the cotton gin (engine) which proved capable of cleaning upland cotton, and so made the cultivation of that crop a commercial possibility. The conditions may be described in Whitney's own words, used in a memorial to the government, asking for an extension of his patent. He showed "That, being in the state of Georgia in the year 1793, he was informed by the planters that the agriculture of that State was unproductive, especially in the interior, where it produced little or nothing for exportation. That attempts had been made to cultivate cotton, but that the prospect of success was not flattering. That of the various kinds which had been tried in the interior none of them were productive, except the *green seed cotton*, which was so extremely difficult to clean as to discourage all further attempts to raise it. That it was generally believed this species of cotton might be cultivated with great advantage, if any cheap and expeditious method of separating it from its seeds could be discovered, and that such a discovery would be highly beneficial both to the public and the inventor."

638. Invention of the saw gin by Whitney, 1793. — Encouraged by the terms of the national patent law, on which he relied for a monopoly of his invention, Whitney set to work, and in a short time had devised a form of cotton-gin which, with minor alterations, has remained in use ever since. The raw cotton was fed through a wire grating to a cylinder on the surface of which were wires or saw teeth, that caught the fibers and pulled them through, the seeds being retained by the grating. The gin was a complete success, enabling a man to clean several hundred pounds of cotton in a day. Whitney himself reaped comparatively little benefit from his invention, as he found it impossible to prevent infringements; he said in 1812, with slight exaggeration, that the total amount which he had realized was less than the saving in cost effected in one hour by his machines then in operation. The country, however, was an immense gainer, for the last obstacle to the successful cultivation of cotton was removed.

639. Extension of cotton cultivation, and increase of exports. — The exports of cotton, which in 1793, the year of Whitney's invention, had been only two thousand bales, rose by leaps and bounds. In 1802 they passed one hundred thousand bales, in 1822 five hundred thousand, in 1834 one million, in 1843 two million, in 1858 three million. The States along the Atlantic coast, in which cotton culture first sprang up, continued for many years to be the main seat of the industry. After the war of 1812, however, the cultivation of cotton spread in the Southwest, where rich river bottoms and prairie lands offered soil of exceptional fertility, and where the numerous rivers facilitated transportation. The exports of cotton from New Orleans increased tenfold in the years 1816 to 1830, and at this later date the western States produced the larger part of the cotton supply. At the close of the period which we are studying (1860) over half of the total crop was raised in the three States Alabama, Mississippi, and Louisiana.

640. King cotton. — The success of the cotton culture in this country was attended by far-reaching results in economic and political history. We must restrict ourselves here to the commercial aspects of the cotton industry, without discussing such topics as its relations to slavery and its influence in bringing on the Civil War.

Never in the world's history have producers enjoyed such an exalted position in commerce as that which was held by the planters of the cotton States. The larger part of the world's supply of an article regarded as of the first necessity came from a comparatively restricted area in the South. The people of Europe and other continents had become used to cotton textiles, great factories had grown up to manufacture them, but it seemed as though people must go unclad and factories must stop work, if the United States should refuse to deliver raw cotton. For years before the Civil War fear of a cotton famine had haunted the minds of European manufacturers.

Cotton took a position in national commerce equal in importance to that which it occupied in international trade. Not only did it furnish directly more than half of the total exports of the United States; it shared its prosperity with other industries, and influenced the development of every part of the country. Northern merchants made fortunes in handling and transporting southern cotton; the manufacturers of every district found in the South a market where people had plenty of money to buy goods which they were too busy to make; the farmers of the Northwest supplied in considerable part the needs of the South for food. The people of the South were not blind to these facts, and tended, indeed, to exaggerate their importance. As a sample of their attitude this extract from a speech by Senator Hammond in 1858 may be taken: "Without firing a gun, without drawing a sword, should they make war on us, we could bring the whole world to our feet. What would happen if no cotton was furnished for three years? I will not stop to depict what every one can imagine, but this is certain, England would topple headlong, and carry the whole civilized world with her. No, you dare not make war on cotton. No Power on the earth dares to make war on it — cotton is king."

bull & more bull.

641. Slight contributions of the South to exports, aside from cotton. — In the period before the Civil War, when southern plantations were worked by slaves, it was considered to be the best policy to plant cotton continuously, without alternation or diversification of crops, though this policy led necessarily to exhaustion of the soil and required frequent removals to fresh land. Cotton was, therefore, the single product which the South contributed in great quantities to the internal and foreign trade of the country. The rice culture was maintained on the eastern coast and was extended along the Gulf, but there was little increase in the export of rice, as the crop was consumed largely at home. Indigo disappeared from the list of American products. Tobacco production spread in the States of the Ohio valley, and the exports of this ware rose after the middle of the century to double the value which they had about 1800, but a comparison of the figures given at the opening of the chapter shows that tobacco declined still further from the position it had held in colonial times.

642. Trade between the North, the South, and Europe. — In 1860 only one third, approximately, of the total exports of the country came from the North. Conditions in this period resembled closely those of colonial times, with the substitution of the southern States for the West Indies in the triangle of trade. The North imported from Europe far more than it could export in return; it shipped South, however, large quantities of foodstuffs and manufactures; and the South gave in exchange bills on Europe which were drawn against the great quantities of cotton sent thither. Cotton from the South to Europe, manufactures from Europe to the North, manufactures and foodstuffs from the North to the South: such were the three sides of the triangle.

643. Chief exports from the North. — The North could no longer look to colonial industries, like fisheries and forestry, to provide the means of purchasing the foreign wares which it required. The exports from those industries had increased, it is true, but were still so small that they had become items of slight importance in the total. The exports of manufactures, on the other hand, had grown very rapidly, and formed now a considerable item in our trade. The South contributed to this class some wares (manufactured tobacco, turpentine, cottonseed oil cake), but the products of developed manufacture came almost entirely from the North; manufactures of cotton and of iron were the leading items. The rise of these manufactures will be treated in the next chapter. At the North, however, as at the South, agricultural products held the first place among the exports. Foodstuffs and animal products were exported to the value of about fifty million dollars, and these wares came chiefly from the North. The total is small in comparison with that of the cotton export (one hundred and ninety million), and gave little promise of the remarkable expansion which was to follow after the Civil War; still, foodstuffs and animal products were the mainstay of the Northern export trade.

644. Gradual increase in the exports of foodstuffs. — The increase in the exports of northern agriculture was rather less than would be expected from a people rapidly increasing in numbers and provided with an abundance of fertile land. For many years after the close of the war of 1812 commerce in wheat and flour languished, and even toward 1840 the export of those articles was less than it had been at the opening of the century. There was talk, even, of imposing a duty on wheat, to protect the farmers of the Atlantic seaboard from imports. As late as 1835 Ohio was the only grain-exporting district of the West, and the first grain shipment on the Great Lakes, of which there is record, was made about that time. Chicago became of importance as a center of grain shipments only about 1850. In the decade from 1850 to 1860, however, the Chicago shipments increased (roughly) from two to twenty million bushels, and the total exports rose rapidly; canals and railways were at last bringing the cheap grain from the West to the people of Europe, who at last were ready to welcome it. The export of animal products was growing also. Lard and pickled pork were the chief items under this head, for the lack of modern appliances prevented the export of fresh meat; but the price of hogs at Cincinnati doubled in the fifteen years preceding 1860, and western farmers were encouraged to give increased attention to the supply of animal products.

645. Exports of precious metals; result of the California gold discoveries. — The last item in the list of exports given at the beginning of the chapter is that of precious metals, which we shipped abroad to the value of more than fifty million dollars. Ordinarily the exports and imports of precious metals are not included in the figures of a country's trade. Coin and bullion are used to make up the balance of accounts between different countries; they may leave a country one year and may return to it the next year; and they represent, therefore, no contribution to commerce like that of the shipment of merchandise. An exception must be made, however, in the case of the few countries which produce such quantities of gold and silver that they can regularly export a surplus. The mines of precious metals are to these countries as much a commercial resource as are the coal or iron mines to countries like England and Germany. The United States was not at first among these favored countries: it produced little gold and less silver, and needed to import most of the precious metals which it required for use as currency and in the arts. These conditions were suddenly reversed by the discovery of gold in California in 1848. The gold production of the country, which had been formerly less than a million dollars a year, had risen by 1850 to fifty million, and provided the country with a handsome surplus which it could afford to exchange abroad for merchandise.

QUESTIONS AND TOPICS

1. Prepare a graphic chart of the figures, sect. 633, for comparison with earlier and later conditions.

2. Review the distinction between domestic and foreign exports. The principal foreign wares exported from the U. S. in 1860 were as follows, in millions of dollars: coffee 2.2, sugar 2.1, tea 1.9, hides 1.6, tobacco 0.7. From what countries do you think these wares came?

3. Write a report on one of the following topics:

(*a*) The cotton plant and cotton fibre.
(*b*) Different varieties of cotton.
(*c*) History of cotton, outside America, before 1800.
(*d*) History of cotton in America before 1800.

[Encyclopedias; commercial geographies; Hammond, pp. 3–33, references in bibliography.]

4. Invention of the cotton gin by Whitney, [Hammond; Amer. Hist. Review, Oct., 1897, 3: 90–127.]

5. What changes have been made in the cotton gin since its invention? [Encyclopedia.]

6. How long do you think the world would have had to wait for an efficient gin if Whitney had not supplied the need?

7. Importance of cotton in southern agriculture before the Civil War.

[Hammond, 67–119; J. A. B. Scherer, Cotton as a World power, N. Y., 1916.]

8. What other wares have held the position of "king" in the commercial countries. In what period and in what country were the following wares especially important among the exports: tin, silk, wool, spices, silver?

9. Connection of cotton and slavery. [Hammond, 34–66.]

10. The cotton trade, 1815–1860. [Hammond, 243–277.]

11. Rice culture before the Civil War. [Depew, chap. 38 by Talmage; DeBow, vol. 2.]

12. Later history of American fisheries, and international questions to which they have given rise. [Census; McMaster and Moore in Cambridge Mod. hist., vol. 7, 363 ff., 657 ff.; Carnegie History, vol. 2, part 2.]

13. Trade in turpentine and rosin. [Census, 1900, 9: 1001–1012.]

14. The development of the American lumber industry. [Depew, chap. 30, by Fernow.]

15. Development of Cincinnati or Chicago as a market for meat and breadstuffs. [Local histories.]

16. What countries were the chief sources of supply of gold and silver before 1850? [Encyclopedias.]

17. The California gold discovery. [Narrative histories of U. S.]

18. Commerce of California before the discovery of gold. [Read the interesting narrative of a sailor's life by R. H. Dana, Two years before the mast, Boston, Houghton.]

19. The overland route to California. [Henry Inman, The old Santa Fe trail, N. Y., Macmillan, 1899. Salt Lake trail, N. Y., 1898.]

20. Development of gold and silver mining. [C. H. Shinn, Story of the mine, N. Y., Appleton, 1896.]

BIBLIOGRAPHY

See chapter xlviii.

CHAPTER L

IMPORTS, POLICY, DIRECTION OF COMMERCE, 1815-1860

646. Chief imports in 1860. — The imports of the United States have been so varied in character that it is impossible to classify them with any exactness. An attempt will be made in this section, however, to indicate the leading items in our imports in 1860, giving values in round millions of dollars. Of the total of the year, 354, the largest share fell to manufactures. Under this head the chief place was taken by the textiles (wool 38, silk 33, cotton 32, linen 10); nearly one third of the total imports of the country was derived from these four leading branches of the textile manufacture. Most of the other manufactures imported fell below the mark of 5 millions; a noteworthy exception is the item of iron and steel in various forms, amounting to 21 millions. In comparison with the amount of manufactures imported, the class of raw materials, to be used for manufacture in this country, was still small; we purchased abroad considerable amounts of hides and skins, wool, etc., but in general we either manufactured our wares out of materials procured at home or sent abroad for the finished product. The colonial wares had gained both in value and in the proportion which they formed of the total imports; the chief items in this class were sugar 31, coffee 21, tea 8, cigars and tobacco 6, molasses 5, altogether amounting to about one fifth of the imports of the year.

647. Significance of the import trade at this time. — The general character of our import trade, evidently, had not changed greatly in the seventy years since the establishment of the national government. The attractions of farming were so great, when fertile land was to be had in abundance and when there was an eager demand for such products as cotton and foodstuffs, that the American people still gave most of its energy to raising raw materials; and found it profitable still to look to other countries for much of its supply of manufactured wares. The policy of protection, which was established in the period under consideration, had not as yet succeeded in building up manufactures capable of supplying the wants of the home market. The comparatively small amount of materials imported for our factories showed that our manufactures were still local in character, without the strength, or else denied the opportunity, to reach out and draw from distant sources the raw materials which they could work up and return to the currents of the world's trade.

The growth in the imports of colonial products represented the increase of general prosperity, enabling the people to consume luxuries in greater quantity. Dividing the amount of these wares imported by the population of the country, and so securing a rough idea of the share falling to each individual, we find that the per capita consumption rose as follows from 1790 to 1860: coffee from about 1 pound in 1790 to over 5 pounds in 1860, sugar from less than 5 pounds to over 30.

648. Growth of domestic manufactures. — Though the imports of manufactured wares increased greatly in the course of this period, it must not be assumed that the United States was as wholly dependent on foreign manufactures in 1860 as it had been in 1790. A population growing rapidly both in numbers and in welfare caused a demand for manufactures which stimulated some producers to choose manufacturing instead of farming for their livelihood, and the government aided these individuals by taxing imported wares, and so giving the domestic producer an advantage in the home market. In the following sections we shall survey the chief branches of manufacture which grew up in the United States at this time, and consider the bearing of the protective tariff on their development.

649. Increase in the use of coal. — Some idea of the development of modern forms of manufacture in the United States can be gained by tracing the history of coal, the great source of power for the developed system of factory industry. The demand for coal was still very small in the first quarter of the century; in 1830 the total production was less than half a million tons, and the United States was surpassed in coal output by four of the states of Europe. The second quarter of the century was marked by a great extension in the use of steam power, and the successful application of coal to iron making; by 1850 the United States had reached the second place among the countries of the world in coal production, with an output of over six million tons. Small as this seems in comparison with the output of Great Britain at that time (54 million), or the output of the United States in 1913 (over 500), it marked a tremendous advance over conditions as they were about 1800, and showed that at least the country had passed through the preparatory stage of industrial development.

650. Sluggish development of the iron industry. — While the use of coal is perhaps the best index of a country's development in the modern forms of manufacturing and transportation, the use of iron is also certainly of great significance; iron is the fulcrum through which the power of steam is applied, to repeat Jevons' figure of speech. Great importance attached, therefore, as has been noted in previous chapters, to the improvements introduced in the English iron manufacture towards 1800, by which it was freed from dependence on charcoal, and was enabled to turn out increased quantities of pig and bar iron at reasonable prices. American iron makers showed a slackness which we find it hard now to forgive in adopting the improved processes. Coal and coke were not used in the American iron manufacture until about 1840, and the new methods of puddling and rolling, which had transformed the English iron industry, were applied in this country only shortly before that date, about half a century after their introduction in England. Some excuse can be found for our delay in the lack of transportation facilities for bringing the iron ore and coke together. The result, at any rate, was unfortunate. A heavy duty was laid on imported iron, to protect the home producer, but did not make up for his inefficiency. It was necessary, therefore, throughout the period, to import a considerable part of the necessary pig and bar iron and steel, paying the higher prices caused by the tariff; and the machine industries could not but suffer from the added expense. Down to 1860 our iron industry was not strong enough to export crude iron in any quantity, though American ingenuity succeeded in finding a market for considerable quantities of iron manufactures.

651. Success of the cotton manufacture. — With one of the branches of textile manufacture, that of cotton, the Americans had more success. Thanks to the alertness of the cotton manufacturers in introducing improved machinery, and to the advantages they enjoyed in their supply of raw material, they had soon outgrown the need of protection. The higher wages which they paid to American laborers were more than offset by the quantity of work turned out, and in the manufacture of the common sorts of piece goods they did not fear the competition of any other country. Large manufacturing towns grew up in New England to meet the demand for cloth which formerly had been made in the household of the consumer, and by 1850 there were as many cotton spindles at work in New England as there were inhabitants. American cottons were sold so readily in South America and other foreign markets that English manufacturers condescended to imitate them, and our exports of cotton manufactures in 1860 amounted to over ten million dollars, more than double the export of fish products, and not far below the export of forest products. The strength of the American cotton manufacture lay in the production of plain cloth; the bulk of the imports consisted of finer and fancy products.

652. Failure to establish a strong woolen manufacture. — The United States was, of course, peculiarly fortunate in its supply of raw material for the cotton manufacture. It enjoyed no such advantage with respect to wool. The wool fibers from American sheep were comparatively short, and unsuited to the manufacture of the finer woolens and worsteds. Manufacturers were hampered in their use of other wools by a tariff designed to protect the sheep growers, and paid for other raw materials higher prices than their competitors in England, while they could not, as in the cotton industry, make up for the higher wages in this country by the skilful application of machinery. Under these conditions the duties designed to check the importation of woolen manufactures from abroad were only a partial protection to the American producer; and the woolen manufacture did not flourish in this country. We could in large part supply the demand of the home market for coarser fabrics (flannels, blankets, etc.), but we manufactured no wool for export, and we continued to import the finer fabrics.

653. Other manufactures. — In the manufacture of other textile products which were imported in considerable amounts, silk and linen, the United States made no important progress during this period. Sewing silk and silk trimmings were made in the country, but the great bulk of silk manufactures were bought in France and England, while there were only the beginnings of a linen manufacture in this country before the Civil War.

Other manufactures existed besides those named, but the most important of them were devoted chiefly to the first processes in working up raw materials, and scarcely correspond to our ideas of manufacturing at the present time. This point is illustrated by the list of domestic manufactures exported from the country in 1860, as given by the government. Of the total of 37 millions, the items cotton 10.9 and iron 5.7 were the product of developed manufacture, and the same may be said, perhaps, of the item copper and brass and their manufactures, 1.6. Among the other items, however, the leading products were of a different character, and showed strength in raw materials rather than in manufacture (manufactured tobacco 3.3, spirits of turpentine 1.9, oil cake 1.6, household furniture 1.0).

654. Dependence of the South on the North for manufactured wares. — It is noteworthy that most of the manufactures which grew up in the United States in this period were established in the North. The prevalence of slavery in the South and the attractions of agriculture in that section prevented the rise of any considerable manufacturing industry; and the South manufactured even of its staple product, cotton, less than one fifth as much as the mills of the North. Conditions were thus adapted to the triangular trade, as it has been termed above, by which surplus shipments from the North to the South balanced surplus shipments from the South to Europe. The results were set forth in the following extract from a book published by a Southerner in 1857:

"In one way or another we are more or less subservient to the North every day of our lives. In infancy we are swaddled in Northern muslin; in childhood we are humored with Northern gewgaws; in youth we are instructed out of Northern books; at the age of maturity we sow our 'wild oats' on Northern soil; . . . in the decline of life we remedy our eyesight with Northern spectacles; in old age we are drugged with Northern physic; and, finally, when we die, our inanimate bodies, shrouded in Northern cambric, are stretched upon the bier, borne to the grave in a Northern carriage, entombed with a Northern spade, and memorized with a Northern slab!"

We shall see in the following sections, reviewing the course of tariff policy, that the North and the South took opposite sides with respect to the protective tariff. The South, which had practically no manufactures, desired free trade, that it might make its purchases in the cheapest market, while the North desired protection for its growing manufactures.

655. Beginning of the system of protective tariffs, 1816. — In previous sections (609–611) attention was directed to the fact that the earliest tariffs were but slightly protective. The establishment of manufactures was stimulated much more by the interruption of commerce at the time of the embargo and of the war with England than by any deliberate policy of protection. At the close of the war of 1812, however, the time seemed to have come for the legislators to intervene in favor of American manufacturing industries. The privations of the war period awakened people to the dependence of the United States on Europe, which seemed unworthy of a free state and which seemed unsafe from the military standpoint. The manufactures which had grown up during the war were exposed, at the return of peace, to a flood of imports which threatened to reconquer the American market for the foreign manufacturer. The tariff of 1816, therefore, included a number of duties designed to restrict imports for the benefit of the American producer; the scale of duties was moderate, the highest permanent duty being 20 per cent.

656. Course of tariff policy, 1816–1860. — The conflict of interests between different sections of the country led to many changes in the tariff schedules, and occasioned some bitter political contests. Without attempting to recount the details, it may be said in summary that the course of the tendency was toward higher duties till about 1830, when some of the duties amounted to 40 per cent and 50 per cent or more.

The high duties were particularly obnoxious to Southerners, who considered them a tax taken from their pockets for the benefit of the North, and who fought persistently for a reduction. They finally secured a hearing; and duties were steadily reduced in the period from 1833 to 1842 until they stood, at the later date, at a general level of 20 per cent. The tariff remained at this low level only two months, when it gave place to another tariff with higher duties; the average of the duties levied *ad valorem* was 33 per cent, while some duties rose far above this rate. Finally, from 1846 until the Civil War, the country was under a low tariff; duties were reduced until the maximum protective duty was 24 per cent, while the general level was about 20 per cent.

657. Effect of the tariff on industrial development. — What effect did the tariff policy have upon the industries and the commerce of the country? To this question the only safe answer is that the effect of the tariff was much less, for good or for bad, than has commonly been stated by writers on either side of the controversy between protection and free trade. The country has grown rich from the wealth of its natural resources and the character of its people. The tariff diverted into manufacturing more people than would otherwise have chosen that branch of production, but it did not succeed in making them all prosperous. Manufactures which were suited to the conditions of the time, as the cotton manufacture, grew strong under the tariff, and would have grown strong without it; other manufactures, such as those of iron and wool, were still feeble after years of protection. Commerce must have felt the effect of the tariff, for protection could be effective only as it restricted the exchange of wares with foreign countries. We are tempted to ascribe the rapid increase in imports and exports after 1846 to the reduction in duties. Yet, even here, many other influences favored the growth of our foreign trade, and it is impossible to determine which of them all was most effective.

658. Changes in the relative importance of shipping ports; southern ports and the export trade. — In the course of this period the development of new land in the West and Southwest, and the rise in importance of the cotton crop, effected some notable changes in the relative rank of the ports of the country. Measuring importance by the value of the domestic exports, we find that New York now held the first place; this port was in 1860 the shipping point for nearly one third of the total export values of the country. A considerable part of the value of exports from New York, however, was formed of precious metals, attracted there by the banks and the facilities for rapid voyages on passenger vessels. If we confine ourselves to the shipment of ordinary merchandise, we find that New York, in spite of the western connections afforded by the railroads and the Erie Canal, took second place, showing but two thirds of the export values leaving the country by way of New Orleans. This port was the natural outlet for the cotton-growing country of the lower Mississippi valley, and its export of the one ware, cotton, exceeded in value all the merchandise shipped from New York. It was cotton, again, that gave standing to the ports next in rank, Mobile, Charleston, and Savannah; the exports from these cities, aside from that single staple, were insignificant. Old ports like Boston and Baltimore had sunk to the sixth and seventh place, while Philadelphia, once the leader, was still lower on the list, and was outranked by San Francisco, if the gold shipments from that port be counted.

659. Northern ports and the import trade. — The reader who remembers what has been said above about the triangular course of trade in this period will not be surprised to learn that the figures of imports tell a very different story. New York enjoyed an import trade nearly double that of all the other ports of the country together; it was the great distributing point for European manufactures, from which the various ports of the country secured most of their supply. Second in rank, but separated by an immense interval, was another northern port, Boston; while New Orleans was but a poor third, and Philadelphia and Baltimore followed in the order named. Other southern ports, ranking high in the value of their exports, had only an inconsiderable import trade.

660. Changes in the direction of trade. New character of the trade with England. — There had been changes also in the direction of our trade abroad. The following brief table gives figures in round millions, for 1860, which may be compared with the figures for 1790 given in section 573.

It will be noted that our trade with English-speaking people formed still the most important part of our total commerce. A noteworthy change had taken place, however, in our trade with the British possessions. At any earlier period we imported from them far more than we could sell to them in return; the

	Exports	Imports
Great Britain and her dominions	228	177
Including Canada	11	18
British West Indies	5	1
France and her dominions	57	43
Spain and her dominions	20	44
Including Cuba	11	34

balance of trade was against us, as men said. This condition had been reversed by the rise of the cotton trade, and was to be still further affected by our export of foodstuffs. Great Britain was now dependent on us for the raw material of her most important manufacture, and was seeking from us also increasing supply of food, for her factory population.

661. Trade with Canada and the West Indies. — Our trade with Canada was of comparatively recent growth. Restrictive duties had formerly checked exchange with our northern neighbor, but as population and industries developed on either side of the frontier a demand for greater freedom of exchange made itself felt; duties were reduced, a reciprocity treaty was negotiated (1854), and under it many articles were exchanged free of all duties.

It will be noted that trade with the British West Indies had not developed to a similar degree; and it would be apparent, if other figures were included in the table, that our West India trade in general was far less important than it had been in the earlier period of our history. Trade with the French and the Dutch West Indies was, in fact, less in 1860 than in 1790. Among all the West India islands Cuba alone was a prominent exception to this tendency to decline. Slavery was still maintained in that island; and the sugar industry, which had felt severely in other islands the abolition of slavery, continued to flourish there.

662. Expansion of American commerce in Europe, South America, and the Far East. — It may be said, in general, that our commerce had broken through the rather narrow bounds which had formerly directed so much of it to England and to the West Indies. We were building up our trade with the continent of Europe. Our trade with France had increased greatly under the liberal commercial policy of Napoleon III, and we were establishing profitable connections with other European states, as is shown by the following figures for our total trade with them in 1860 (millions of dollars): German states 33, the Netherlands 10, Italian states 9.

Still more noteworthy is the extension of our commerce to the South and to the Far East. During the period under review the states of Central and South America had won their independence from Europe, and were now free to establish such trade relations as they chose. With Mexico and various states of South America (especially Brazil and the Argentine Republic) we had in 1860 a commerce amounting to about sixty million dollars. Our trade with China amounted to about twenty million; and while our trade with Japan (about $150,000) gave no immediate reward for the American enterprise which had opened the ports of that country, it was at least a promise for the future.

QUESTIONS AND TOPICS

1. See sect. 695 for figures of imports which may be charted for comparison with later development.
2. How did the import trade of the U. S. compare with that of England at about this time?
3. Why was it cheaper for the Americans to buy manufactures abroad than to make them at home?
4. What is the effect of a protective tariff, (*a*) on commerce, (*b*) on production, (*c*) on the price of the product?
5. Industrial development, 1790–1860. [Wright, 132–142.]
6. American coal fields. [Nicolls, part 1; commercial geographies.]
7. Early transportations of coal by rivers and canals. [Nicolls, chaps. 17, 18.]
8. Assuming that the protective duty on iron raised its price to purchasers, what must have been the effect on manufactures and transportation? [Compare the sections on Russia, above.]

9. Development of the American iron industry before 1860. [Taussig; Depew, chap. 46 by Huston; Swank.]

10. Difficulties of the woolen manufacturer. [Taussig; North in Depew, p. 482.]

11. Contributions of the U. S. to improvements in machine tools. [Depew, chap. 49 by Sellers.]

12. Cotton manufactures in the South before the war. [DeBow, 1: 233, 2: 101 ff., 3: 24 ff.].

13. Industrial conditions at the close of the War of 1812. [Histories of U. S. by McMaster and Henry Adams.]

14. Tariff of 1816. [Taussig.]

15. Why was the South opposed to protection in this period? [Review the description of the industries and commerce of North and South, and try to see what effect a protective duty on manufactured wares would have on Southerners.]

16. Study in detail the influences, economic and political, determining the character of *one* of the following tariff acts: 1824, 1828, 1832, 1833, 1842, 1846, 1857. [Tariff histories by Taussig and others; narrative histories of the U. S.]

17. Study the commercial history of one of the ports named, sects. 645–6. [Local histories; Encyclopedias.]

18. Commerce of the South before the War. [Maury in DeBow, vol. 3, 1 ff.]

19. Reviewing the list of ports, which of the following factors seems to have been most important in determining their relative rank in the import trade: nearness to Europe, excellence of harbor, facilities for distributing goods by waterways, railroad facilities? Can you add other factors of importance to the list?

20. Make a chart of the figures, sect. 660, and compare it with the chart for the earlier period.

21. Effect on commerce with Canada of the reciprocity treaty of 1854. [Haynes, Robinson.]

22. History of the commerce between the United States and South America. [Rutter; Curtis in Senate Exec. doc., first session, 51st Cong., vol. 8; check list 2685.]

23. Development of American commerce in the Pacific. [Callahan.]

BIBLIOGRAPHY

See chapter xlviii.

CHAPTER LI

NATIONAL DEVELOPMENT, 1860–1914

663. Survey of commercial development, 1860–1914. — In the chapters introductory to the history of commerce in the nineteenth century, attention was directed to the increasing rapidity of movement, which makes the second half of the century a period by itself, distinguished above all others by its wonderful commercial development. That the United States enjoyed a full measure of the world's progress in commerce is shown by the following table, which gives the figures of imports and exports in millions of dollars.

	Imports	Domestic exports	Foreign exports	Total general
1860	534	316	17	687
1870	436	377	16	829
1880	668	824	12	1,504
1890	789	845	13	1,647
1900	850	1,371	24	2,244
1910	1,557	1,710	35	3,302
1913	1,813	2,429	37	4,279

Prices were falling in the last quarter of the century, so that the figures in the text, giving the value of imports and exports, do not do justice to the growth in the physical volume of trade. On the other hand prices began to rise just before 1900 and, therefore, the figures exaggerate the increase of trade in the most recent period. Prices of 1913 were, however, only about one-third higher than in the decade 1890–99 so that after allowance is made for their rise the growth of American commerce in this period remains extraordinary.

664. Internal development of the country. — During this period the natural growth of population was augmented by a steady stream of immigration, which has increased with time and has made to appear small in comparison all previous movements of people to the country. In spite, however, of this growth, the increase in the value of foreign trade has been even more rapid, and the share contributed by the average person to the commerce of the country was greater at the close of the century than at any previous period. The average inhabitant had in 1913 a share of about $18 in the imports, and of about $25 in the exports.

While the preceding period was called the period of national expansion, the period lasting from the Civil War to the close of the century may fitly be termed that of national development. The population continued, it is true, to spread out within the national frontiers. It occupied the great plains leading up to the Rocky Mountains region, and the strip of fertile land along the Pacific Coast, and penetrated the mountains and semi-arid region in all parts where mineral wealth and agricultural possibilities promised returns to the laborer. The most striking feature, however, in the progress of the last forty years has been not so much the breaking-in of new territory as the improved means adopted for making the most of all resources, in old and new territory alike. Improvements of a technical character have transformed the methods of transportation and manufacture, and new methods of cooperation have changed the aspects of business life completely.

The first subject requiring attention is the development of the transportation system.

665. Extension of railroads. — In the recent history of the transportation system of the United States the most noteworthy feature has been, of course, the development of railroads. The railroad mileage of the country in 1860 was divided almost equally between the North, the South, and the West, each section having roughly 10,000 miles. The section which felt most keenly the need of increased railroad facilities was the agricultural West, where the products of rich farm lands were wasted and where corn was not infrequently used for fuel, for lack of means to reach a market. After 1860 the railroads were rapidly extended through the upper Mississippi Valley, and in 1869 the first transcontinental route was completed (Union and Central Pacific). Railroads reaching out like feelers into new regions attracted population and stimulated traffic not only in the new country but also in the older settled districts, where the opportunities for profitable business were multiplied by the increased supply of raw materials and by the widened market for finished products. Old lines were extended and new lines were built until, in 1913, the mileage of the country had risen from about 30,000 as it was in 1860, to over 250,000, showing an average gain of about 40,000 miles in a decade, a greater amount than the total of 1860.

666. Improvements in the operation of railroads. — Equal in practical importance to the extension of the railroad system were the improvements effected during the period in the construction and operation of the lines. This was the time in which steel rails and bridges were introduced, which permitted the use of more efficient locomotives, drawing heavier trains, and so reducing the expense of carriage. Lines which had been constructed in short sections under the control of different companies were now merged in great corporations, operating thousands of miles of track. The railroads had previously been so independent of each other that there was not even a standard gage for the track; some lines set the rails 6 or even 7 feet apart, a California law fixed the gage in that State at 5 feet, while the Missouri Pacific had a gage of 5 feet 6 inches. A difference in gage necessitated, of course, the unloading and reloading of wares in passage from one line to another, and prohibited distant freight movements. Soon after 1860 a movement toward the present standard, 4 feet 8½ inches, brought a uniform gage into use, and when the consolidation of railroads was under way there was no longer a thought of varying from the standard. The first consolidation of a through line from Chicago to the sea was effected in 1869 under the management of Cornelius Vanderbilt (Lake Shore and Michigan Southern and New York Central and Hudson River); and the movement soon spread to other lines (Pennsylvania, etc.). The benefits were greater than the reader may be inclined to suppose. The management of railroads was made at the same time more efficient and less expensive; uniformity of policy was established in such matters as the track gage; and, most important, a new policy of freight rates, designed to stimulate distant shipments, became practicable.

667. Reduction of railroad rates. — The charges for freight movements before 1860 rarely fell below 2 cents per ton-mile. Railroad managers believed that the lowest rates which they could profitably make were, roughly, 2 cents for heavy agricultural produce, 3 for groceries, 4 for dry goods. The improvements effected in road-bed and rolling stock after 1860 suggested the possibility of reducing rates, and the reorganization of small railroads in large systems made it possible to institute reductions to stimulate distant freight movements. The results exceeded all expectations. The railroads found that a reduction brought such an increase of traffic that the lower rates were not only an advantage to the shippers, but also a benefit to themselves; and rates have fallen almost constantly in the course of the period. In 1900 the average freight rate was only three quarters of a cent per ton-mile, and some of the lines between Chicago and the Atlantic coast had reduced their charges very close to half a cent.

668. Contribution of the railroads to recent national development. — The importance of this change in a country of great distances can scarcely be exaggerated. It has transformed the railroad from a luxury for the use of passengers and high-class freight to a necessity for the producers and consumers of the commonest articles. In 1860 even a ware like wheat could not pay the expense of transportation over a distance exceeding many hundred miles, and distant freight traffic was restricted to manufactures and the most valuable of farm products, such as live stock. The reduction in charges has opened a profitable market for the commonest agricultural products of distant western States, and has made accessible the natural resources of all kinds, which otherwise would count for nothing among the economic assets of the country. In 1913 more than half of the tonnage carried on the railways of the United States consisted of ores, coal, and other products of mines, which could scarcely have been carried at all in 1860. The railroads now carry a tonnage far exceeding that transported through other channels (rivers, lakes, canals, and coasting trade); and it may be said in sober earnest that a considerable proportion of the people in the country would starve, without the means of earning a livelihood, if the railroad improvements that have come since 1860 were suddenly swept away.

Some idea of the growth of railroad service in the United States in recent years can be gained from the accompanying brief table, which pictures the contribution of the railroads in their two important activities, the carriage of freight and the carriage of passengers.

RAILROAD SERVICE IN THE U.S., 1890–1910

(*Figures in milliards:* 000,000,000 *omitted*)

	1890	1895	1900	1905	1910
Tons carried one mile...........	77	85	141	186	255
Passengers carried one mile......	11	12	16	23	32

669. Relative decline in transportation by canals and rivers. — The development of the railroad system has not entirely done away with the previous systems of internal transportation, but it has reduced them to subordinate importance. The decline is especially noticeable in the case of canals. Even in

1880 nearly half of the total canal mileage had been abandoned and a large number of the canals remaining in operation were not paying expenses. The cost of transportation on the canals has been reduced by deepening them to take in larger boats; tolls have been entirely abolished, as in the case of the Erie Canal; and still the superior speed and certainty of transportation by rail has robbed the canals of the bulk of the traffic. Some of the river routes have fared better. The Mississippi River system, notably, is still an important channel of trade, but even in the territory it serves the railroads far outrank it in importance, and most of the inland waterways have lost their previous significance.

670. Importance of the Great Lakes; St. Mary's Canal. — While the country could now renounce, without very serious loss, the rivers and canals which were formerly so important as means of transportation, it could ill afford to dispense with the Great Lakes along its northern boundary. In the first half of the century Lake Erie was a useful means of communication with the growing States of the West, and gained greatly in importance with the construction of canals after 1825. It was not until the second half of the century, however, that the three western lakes showed their possibilities as channels through which the national resources might be conducted to districts where they could be best utilized. Between 1860 and 1900 the tonnage on the Great Lakes grew sixfold, and increased even more in carrying capacity as wooden sailing vessels gave place to large steel steamers. Freight rates have fallen below one tenth of a cent per ton-mile, and immense amounts of ore, coal, grain, and lumber have thus found a cheap means of access to market.

In 1855 a canal was completed to avoid the rapids in St. Mary's River at the outlet of Lake Superior, and this canal, since deepened and improved, has become one of the great commercial channels of the world. The Lake Superior region has proved to be wonderfully rich in iron, copper, timber, and other products essential to modern industry. In 1913 the tonnage of vessels passing through the St. Mary's Canal was greater than the tonnage entering the seaports of the United States from all foreign countries, and was more than double the tonnage passing through the Suez Canal.

671. Decline of American shipping. — In contrast with the great development of the means of internal transportation we have to note, in this period, a decided decline in the American shipping engaged in foreign trade. The total tonnage of the country was in 1913 nearly double what it had been in 1860, and entitled the United States to a position high up among trading countries. About one third of this total, however, was employed on the Great Lakes, and most of the remainder was engaged in the coasting trade. Both of these branches of navigation could be, and were, protected by law against the competition of foreign ship-owners. The trade of this country with other countries, however, could not be restricted to American vessels without danger of retaliation; and the attempts of the United States to favor its own vessels in foreign trade, by taxing foreign vessels at the port of entry, had been given up before 1860. Now in this branch of shipping, in which the vessels of all countries of the world compete on equal terms, the tonnage of the United States declined from 2.5 million in 1860 to 1.0 in 1913.

672. Effect of the Civil War on the merchant marine.— Of this great loss in tonnage the larger part fell in the years immediately following 1860, the period of the Civil War. The southern States, unable to break the blockade which closed their ports and prevented the sale of their cotton, sought to retaliate by loosing swift cruisers to prey on the ships which sailed under the United States flag. The most celebrated of these cruisers, the *Alabama*, was fitted out in England, and for two years, until its destruction by the *Kearsarge* in 1864, haunted the chief routes of trade, and captured no less than 69 vessels. Other cruisers were less successful, but altogether 261 Northern vessels were taken. The fear of capture caused a decline in tonnage far greater than the actual losses at sea;

American ship-owners found their profits eaten up by heavy insurance charges, and sold their vessels to foreigners, who could navigate them in safety under a neutral flag. Altogether the country came out of the war with about a million tons of shipping less than it had owned at the beginning.

673. Other causes of decline. — The American merchant marine would have recovered from the losses of the war but for other difficulties which it faced. This was the period in which steamers began to gain rapidly on sailing ships, and in which iron began to be extensively used in ship-building. The Americans had at this time neither the resources nor the experience to compete with the English in the new forms of naval construction, and even before the war it was apparent that the English were drawing ahead. Moreover, the war had, indirectly, a great influence on the fortunes of American shipping, for it led to a great increase in the tariff and to heavy taxes of all kinds. It cost more both to build and to navigate an American ship than it had cost before the war or than it cost an English owner. Add to these influences the fact that the country was just entering the period of great railroad extension, and that the West now offered wonderful opportunities for the investment both of labor and capital; and it is not surprising that the American people turned from the sea to the land, and resigned the high position which they had formerly held in foreign carrying-trade.

674. Recent position of the merchant marine. — Since 1860, therefore, the United States has relied mainly upon foreigners to carry its freight across the seas. Of the tonnage that cleared from ports of the United States for foreign countries in 1913 about one quarter sailed under the American flag. The effective service of American ships did not, however, correspond to this proportion; they carried only about one-tenth in value of the exports that went out by sea. Various attempts have been made to stimulate the construction and navigation of American ships by the grant of subsidies from the national government, but the success has been very moderate, and the people have been in general unwilling to levy taxes for the support of this particular industry. In one respect legislation has become more liberal; the Panama Canal Act of 1912 made it at last possible, under somewhat severe restrictions, to register under the American flag foreign built vessels engaged in foreign trade.

675. Development of national manufactures. — Part of the energy diverted from the sea found a fruitful field of labor in the developing manufactures of the country. The period from 1860 to 1914 marked the advance beyond the age of trial and experiment in the history of American manufactures; at the close of this period the United States was the greatest manufacturing country of the world, supplying most of its own requirements for manufactured wares, and producing a large surplus for export to other countries. The development of the transportation system was the indispensable condition of this progress. The railroads have brought all parts of our great national domain so closely together, in a commercial sense, that the choicest natural resources of the continent have been made available at the centers of production. Abundant labor has been supplied both by the growth of the native population and by the increasing flow of immigrants. Leaders have arisen from the people, stimulated to energy by the rapid promotion which has been granted on proof of signal ability; and the necessary capital has been contributed by investors in all parts of the world, who have sought eagerly the opportunity to share in our industrial gains. Finally, our factories have enjoyed an advantage beyond those of any country, in the great market which has stood waiting to receive their products. Within boundaries, each of which measures thousands of miles, lay an area absolutely free to trade, provided with the most efficient instruments of transportation and communication, and settled by a people numbering nearly a hundred million, of prosperous producers and educated consumers.

676. Coal production and the use of steam power. — Not until this period did the country realize the full value of its hidden mineral wealth. The coal deposits of the United States are thought to be richer than those of any other whole continent, and the Ohio Valley has coal mines together with iron deposits and rich agricultural resources in a combination which is unmatched. The coal production of 1860 (13 million tons) was considerably larger than in previous decades, but it seems insignificant in comparison with 240 million of 1900, or the 509 million of 1913. Bituminous coal, the kind chiefly used in manufactures, formed only one third of the total output in 1850 and only one half even in 1870, while in 1913 it comprised four fifths of the whole. In coal production the United States now led the world.

The vast increase in the coal product was used in innumerable ways, but it found its chief employment in furnishing motive power to the transportation system, and to the factories of the country. In studying the history of coal production one is inclined to say that the country did not really enter the age of steam until after the Civil War. The total horse-power employed in manufactures in 1869 (2.3 million), was derived from steam and water in almost equal proportion. In the period closing in 1914 the power employed increased about ten-fold (to 22.5 million), and of the increase steam supplied nearly three-quarters.

677. Machinery. — That the Civil War really marks a dividing line in our industrial progress is shown by the history of the Patent Office; within a few years after the close of the war the number of patents granted increased greatly, and the new level thus established was steadily maintained. American machine manufacturers made in this period their great contributions to mechanical progress: the system of interchangeable parts, automatic and specialized machines, the utilization of by-products, etc. Brass screws at one time could be produced only at great expense; it is characteristic that some manufacturers would now make them absolutely free of charge, if the customer would furnish the brass rod and would allow them to keep the chips of brass which were cut off in the process.

It is impossible here to trace the history of manufactures in detail, but a single manufacture, that of carpets, may be taken for illustration. In the carpet industry about 1835 modern factory methods were unknown; weavers worked at home with old-fashioned hand looms, producing 7 or 8 yards of inferior carpet per day. Power looms were invented, and were introduced little by little, but even after the Civil War nearly half the carpets were still woven on hand looms. Since that time has come the great advance in the industry, by the introduction of improved power machinery, which has reduced the price of fine tapestries and Brussels to that formerly paid for the rudest ingrain, and which has stimulated an immense increase in consumption.

The rapid development of the national manufactures in this period may be shown by brief statistics, in thousand millions of dollars; the capital invested grew from 1.0 to 22.8 while the value of the product grew from 1.9 to 24.2.

678. Extension of manufactures in the West and South. — There had been, moreover, a noteworthy change in the distribution of manufactures throughout the country. The northeastern States had greatly extended their manufacturing plants, and relatively to population no European state rivalled New England in output: but American manufactures had extended also into the West and the South. The southern States, instead of sending their raw cotton to the North or to Europe, began to manufacture it in increasing quantities, and now competed with northern mills for the markets of the Mississippi Valley. The development of iron production in the South was phenomenally rapid. The rich coal and iron fields of the Southern Appalachian range were opened, and contributed now an important share of the total output, while large industrial centers were growing up in Chattanooga, Birmingham, and other Southern cities.

QUESTIONS AND TOPICS

1. Chart the figures as before; if the same scale is used the chart may be pasted to that previously made.

2. Industrial aspects of the Civil War. [Wright, 143–158.]

3. The population of the country was as follows, in round millions: 1860, 31; 1870, 39; 1880, 50; 1890, 63; 1900, 76; 1910, 92. Calculate the commerce per capita, and insert the line on the chart.

4. What has been the gain in population of your own State in this period, compared with earlier periods? [Abstract of the Census.]

5. Write a report on the history of one of the western railroads. [Cy Warman, Story of the railroad, N. Y., Appleton, 1898, $1.50.]

6. Technical improvements in railroads. [See references in chap. xxx, and Johnson, chap. 4.]

7. Development of railroad organization. [Hadley, chap. 5.]

8. Contributions of railroads to industrial development. [Hatfield, Lectures, 81 ff.]

9. Freight service of the modern American railroad. [Johnson, chap. 9.]

10. Present and future of the Erie Canal. [Encyclopedia; Poole's Index.]

11. Possible future of ship canals in the United States. [Report of the Deep Waterways Commission, House Doc. 192, 54th Cong., 2d. sess.]

12. River transportation in the Mississippi Valley. [Abbot, chap. 8; Census, 1890, Transportation by water, pp. 393–465; Report of Indust. Comm., 1900, 9: clxxxiv–clxxxviii.]

13. Place of the Great Lakes in our modern transportation system. [Tunnell; Marvin, chap. 17; Abbot, chap. 7.]

The St Mary Canal. [Tunnell; Fairlie, Ship canals, p. 67 ff.]

14. What would be the effect on lake traffic of commercial union with Canada?

15. The coasting trade of the United States. [Marvin, chap. 15; Van Metre in Carnegie History, vol. 1, chap. 20, 21.]

16. Effect of the Civil War on shipping. [Marvin, chap. 14; Cambridge Mod. Hist., vol. 7, chap. 17, by Wilson; Rhodes, Hist.]

17. Decline of American shipping since the War. [Marvin, chaps. 16, 18; Wells.]

18. The question of subsidies. [Ringwalt, Briefs.]

19. Ship building in the United States. [Depew, chap. 18 by Cramp; B. Taylor in Fortnightly Rev., 1899, 71: 284–299; John H. Morrison, History of New York ship yards, N. Y., 1909.]

20. Taking the heads suggested (natural resources, labor, capital, means of transportation, market), how would the following countries,

in your opinion, compare with the United States as a field for the development of manufactures: Belgium, China, Germany, Russia, France?

21. Industrial development, 1860–1890. [Wright, 159–188.]
22. Transportation of coal by railroads. [Nicolls, chaps. 19, 20, 21.]
23. Geography and organization of the coasting trade in coal. [Nicolls, chap. 22.
24. Methods employed in American coal mines. [Nicolls, part 2.]
25. Power employed in manufactures. [U. S. Census, Manufactures, General report, Abstract of the census of manufactures.]
26. The New South. [Coman, 292–298.]

BIBLIOGRAPHY

Bibliography. — See chap. xlv and add: Poole's Index and its continuations, Annual library index and Readers' guide to periodical literature; debaters' handbooks, ed. R. C. Ringwalt, E. R. Nichols, and Debaters' handbook series.

General. — Wells, ** Rec. econ. changes; Edward Atkinson, * Industrial progress, N. Y., 1890, * Distribution of products. N. Y., 1892; H. R. Hatfield, ed., * Lectures on commerce, Chicago, 1904; J. F. Rhodes. * History of U. S., N. Y., 1893 ff.; R. Mayo-Smith and E. R. A. Seligman, ** Commercial policy, 1860–1890, Leipzig, 1892.

Special. — Railroads: J. Moody, ** The railroad builders, New Haven, 1920; Cy Warman, * The story of the railroad, N. Y., 1898; C. F. Adams, Jr., and Henry Adams, Chapters of Erie, Boston, 1871. Lake trade: J. C. Mills, ** Our inland seas, Chicago, 1910; G. Tunnell, * Transportation on the Great Lakes, Jour. of Pol. Econ., June, 1896, 4: 332–351; Charles Moore, editor, The Saint Marys Falls canal, Detroit, 1907, S. V. E. Harvey, Jubilee annals of the Lake Superior ship canal, Cleveland, 1906. Industrial: H. Thompson, ** The age of invention, New Haven, 1921; J. W. Roe, * English and American tool builders, New Haven, 1916; B. E. Hazard, Organization of the boot and shoe industry before 1875, Cambridge, Harvard Press, 1921; M. T. Copeland, The cotton manufacturing industry, Cambridge, 1912.

Sources. — Material in government documents becomes in this period much richer and more varied. Beside the reports on Commerce and Navigation (including many special reports on Internal Commerce) and Commercial Relations, see the Statistical Abstract, Monthly Summary of Commerce and Finance (including current statistics and useful monographs), the Census, Reports and Statistics of the Interstate Commerce Commission, Report of the Industrial Commission, 1900–02, Reports of the Tariff Board and Tariff Commission (including noteworthy reports on cotton and wool manufactures, 1912.) The Bureau of Manufactures, later termed Bureau of Foreign and Domestic Commerce, issued in its Miscellaneous series, a number of reports useful for a survey of commercial conditions just before the outbreak of the World War; no. 11. American manufactures in foreign markets; no. 14, Annual review of the foreign commerce of the U. S., 1913; no. 15, Trade of U. S. with the world, 1912–13; no. 38, do. for 1914–15; no. 23, Trade of the U. S. with other American countries, 1913–14; no. 33, Ports of the U. S. (terminal facilities, commerce, port charges, etc., at 68 selected ports).

CHAPTER LII

EXPORTS, 1860–1914

679. Chief exports in 1913. — The principal items of the export trade of the United States in 1913 are given in the following table, with which should be compared the table in section 620.

EXPORTS OF U.S., 1913, MILLIONS OF DOLLARS

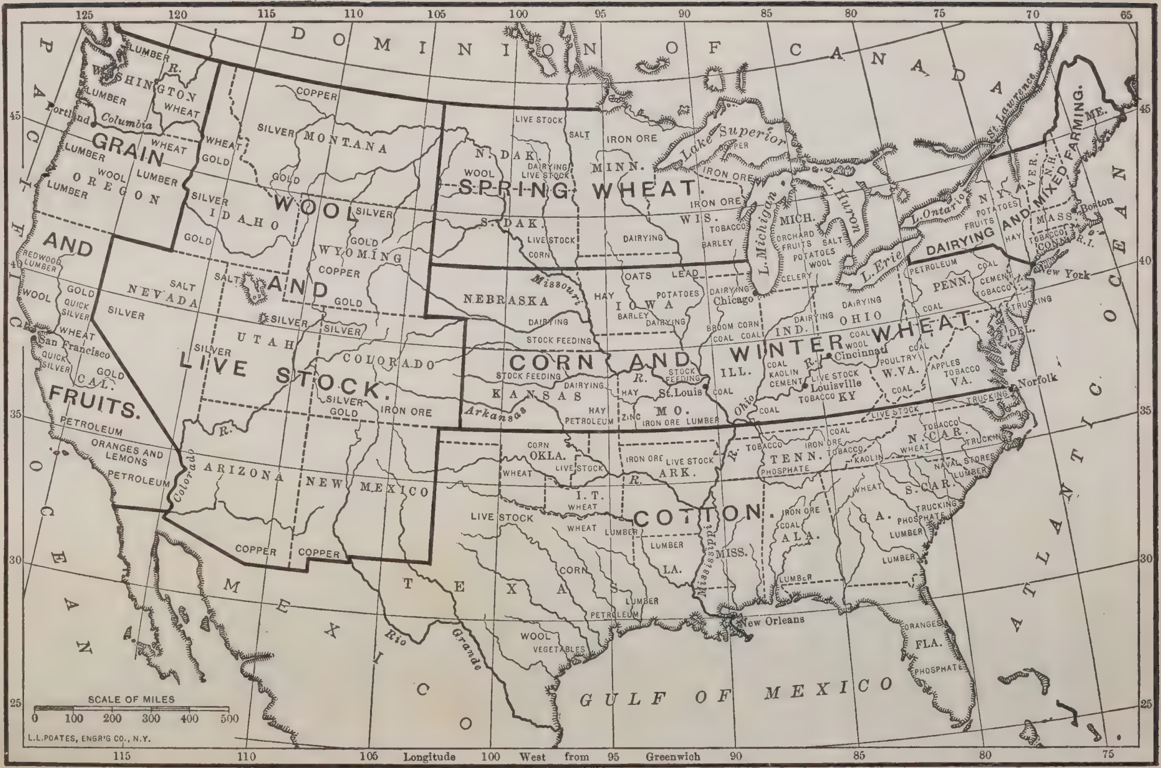
Cotton	547
Iron and steel and manufactures	305
Breadstuffs	211
Provisions, including dairy	154
Copper and manufactures	140
Mineral oils	137
Wood and manufactures	116
Total of these items, omitting decimals	1,610
Total exports of domestic merchandise, including items omitted	2,429
Total foreign exports	37
Exports of precious metals	149

680. Noteworthy changes since 1860. — The table shows that in one general respect the export trade of the country remained unchanged; seven items made up nearly two thirds of the immense total of the exports. While the country continued to rely upon a few great staples for the means of purchasing foreign wares, there had been since 1860 some noteworthy changes in the relative rank of the chief items and in the general character of the export trade. Cotton continued to be a leading item, and was still at the head of the list in 1913. In intervening years it had for a time yielded first place to breadstuffs; and another item associated with the agriculture of the northern and western states, provisions, had risen to prominence.

This item includes dairy products as well as various kinds of meat, but does not include live animals. In general, however, the agriculture of the country no longer occupied the commanding position which it had once held in our export trade. In 1860 American agriculture supplied more than four fifths of the value of domestic exports of the country; in 1913 it supplied less than half. American industry had become diversified. While the country still depended largely on the raw products of its natural resources for the means of exchange in its foreign trade, it had broadened the field of its activities to include its mineral as well as its agricultural wealth, and had begun to sell an increasing share of its products in the form of manufactured or partly manufactured wares.

681. Change in character of the export trade. — The change in the general character of American export trade through this period can be best illustrated by comparing the whole group of foodstuffs, both raw and manufactured, with the group of industrial products (manufactures for further use in manufacturing, and manufactures ready for consumption). The table of figures shows that in the generation from 1880 to 1910 these two groups practically changed places in the part that they played in American export trade. The value of the total

Exports of U.S.	Foodstuffs		Manufactures	
Fiscal year	Value millions of dollars	Per cent of total	Value millions of dollars	Per cent of total
1880	459	55	121	14
1885	325	44	150	20
1890	356	42	178	21
1895	318	40	205	25
1900	545	39	484	35
1905	401	26	611	40
1910	369	21	766	44
1912	418	19	1,020	47



Products of the United States.

product of agriculture at home did not cease to grow, and indeed rose rapidly and steadily. The home market, however, grew so fast that the surplus available for export remained nearly stationary, and formed a constantly smaller part of the expanding total. The country began to look to its industrial resources to buy what it wanted from foreign lands.

682. Reasons for the increase of agricultural exports. — The great growth in the exports of northern agricultural products was due to the improvements in transportation, which opened the markets of the Old World to the food supplies produced so abundantly in the New. There is general agreement that no other part of the earth's surface presents an area that can compare in quantity and quality of agricultural land with the Mississippi Valley. The larger part of this area still awaited cultivation at the close of the Civil War, and was brought under the plow in the period following it. Good land could be had free of charge by settlement under the homestead laws, or could be bought for prices little above what European farmers had to pay as rent or interest.

683. Improvement of agricultural implements. — The productiveness of American agriculture was furthered in this period by still another factor, the improvement of farm implements and machinery. American ingenuity, always proverbial, applied itself to the problem of getting the largest crops with the least labor, and devised means which were peculiarly suited to the conditions of the country and the times. The automatic reaper, on which inventors had long been working, had become a practical success by the middle of the century, and spread rapidly after its merits had been advertised at the Crystal Palace in 1851. An agricultural writer expressed himself as follows in 1866: "The reaper and mower have become 'institutions' — a necessity, and no farmer of any standing ignores their use. The machinery for raking and loading hay in the field, and the unloading in the barn and on the stack, the potato digger, the corn cutter, the bean puller, the cultivator, the corn and bean planter and seed sower, threshing machines, corn shellers, fanning mills, straw and root cutters, hay rakes, tile ditchers, &c., &c., though not all of recent introduction, have all been greatly simplified and improved; in short every implement of farm husbandry, from the hoe to the reaper, has undergone various transformations for the better since the late change of the times. . . ."

Every step in advance led to another. The reaper was displaced by the harvester, which accomplished the same results with less labor; and this in turn gave place to the twine binder, which showed still greater efficiency.

684. Wheat and flour. — The leading place among the breadstuffs exported fell to wheat. A large part of the American wheat crop had found its market in the southern States, before the Civil War. The closing of this market by war threw the whole surplus on Europe, and the wheat exports increased actually ninefold from 1860 to 1863. They declined for a time, when the South was opened to trade, but rose again as the soldiers from the disbanded armies and other colonists settled on the western prairies; and about 1880 grew to very large figures. The method of transportation was improved by building great elevators and introducing machinery to handle the grain at all points of transshipment; a system of grading and classification enabled the wheat to be carried in bulk, without regard to small specific lots; and the charges for storage and movement fell greatly. The instruments of modern transportation carried a ton of wheat from Minneapolis to Liverpool for less than it cost a farmer, thirty years before, to haul it by wagon a hundred miles.

For many years after 1860 most of the wheat was exported as grain, and was milled abroad. The introduction of European improvements, producing flour not by the old millstones but by gradual reduction between rollers, established again the reputation of American flour; and about half in value of the wheat export left the country in the manufactured form.

685. Indian corn. — No other cereal compared in value with wheat among the exports of the United States. In his

"Indian corn speech," delivered in 1877, Tilden predicted a great increase in the export of corn, which yields a much larger supply of food from a given area, and hence can be sold more cheaply. The corn crop was one of the most valuable assets of the country; it served not alone for food, but supplied also raw materials for the manufacture of starch, alcohol, glucose, etc. Its most important use, however, was for feeding and fattening stock, and its contribution to the exports of the country was mainly indirect, in the form of animals and animal products.

686. Stock, meat, and dairy products. — Live stock, chiefly beef cattle, were exported in large quantities in this period; the railroads offered every facility for bringing them to the seaboard, and special steamers transported them across the Atlantic in about ten days. Still more important, however, was the export of animal products. The refrigerator car, patented in 1868, enabled the meat of animals slaughtered in the West to be carried to market in all parts of the country, and stimulated the development of an immense packing industry in the regions where stock were raised and fattened. The export of fresh meat, which began about 1875, increased constantly in the last quarter of the century, and formed a considerable item. Of even greater value was the export of bacon and hams, while lard, tallow, pickled and canned meats contributed in varying proportions to the total of animal products exported. The dairy products occupied a less important place in foreign than in internal trade; and before the end of the period the export of these products had declined to insignificance.

687. Relative decline in importance of exports from the South. — The exports which have been considered hitherto come mainly, though by no means exclusively, from the northern and western States. The South contributed still one great item, cotton, but lost the commanding position in the export trade which it held before the Civil War. It would be a mistake, however, to suppose that the war was the cause of this change. It did, for a time, nearly annihilate the commerce of the South, and it absorbed so much of the capital as to cripple productive power for a considerable period. It swept away the system of slavery, and forced the people to adjust themselves to this most serious of changes. It left untouched, however, the natural resources of the country, and the New South, which has risen since 1880, devoted itself to the task of developing these resources with energy and success. Meanwhile, however, parts of the country which hardly counted in foreign trade before 1860, had been brought within reach of the seaboard, and had been settled by millions of active producers. The balance of commercial power was thus changed, not by the decline of the South but by the rise of other parts of the country.

688. Cotton. — English manufacturers, who had been in great straits for cotton during the Civil War, and had in vain endeavored to find the raw material in sufficient quantity and of satisfactory quality in other parts of the world, returned gladly to their former source of supply, the southern States. The cotton crop brought high prices, the records of cotton production and export in the years before the war were soon reached and surpassed, and the cotton culture continued to grow down to the end of the century. There have been years since 1890 when the price has fallen so low as to leave little profit for the producers; and it has often been suggested that the South was suffering from an over-production of its staple crop, and would fare better if it grew less cotton and more of other crops. Southern farmers were constantly advised to diversify their products. They seem to have followed this advice to a certain extent, and have begun to furnish the northern States with a considerable supply of food products, especially fruit and vegetables, in direct contrast with the course of trade before the Civil War when most of the food shipments were in the other direction. They seem, however, to have found no substitute for cotton as an export product, and have made that still their single great staple in foreign trade.

689. Export of mineral products: iron. — It has been asserted by an eminent geologist that North America is richer than any other continent in the mineral substances which have most contributed to the development of man. Every metal except tin has been found in quantities of economic importance. We must concern ourselves here chiefly with the one metal, iron, that which has held the chief place in economic progress in recent times, and in the production of which the United States has made surprising advance. Before 1860, as noted above, the United States had merely followed England at a respectful distance, in the methods of iron making. Since 1860 the iron makers of America have outstripped all competitors, in the efficiency of their methods and in the quantity of their output, and have made the United States the leading country of the world in iron production. The American iron industry has shown itself competent not only to meet the immense demands of the home market, but also to produce for export in competition with other countries the large amounts shown by the figures at the opening of this chapter.

690. Recent development of the American iron industry. — The following table shows that the advance of the iron industry was slow for a long time, and that its present power is of very recent growth.

	Production in Millions of Tons		Commerce in Millions of Dollars, Iron, Steel, and Manufactures	
	Pig Iron	Steel	Imports	Exports
1860	0.8	——	26	5
1870	1.7	0.07	32	11
1880	3.8	1.2	53	12
1890	9.2	4.3	41	25
1900	13.7	10.2	20	121
1910	27.3	26.1	40	179
1913	31.0	31.3	34	305

Among the causes contributing to this result one of the most important has been the development of the rich ore deposits of the Lake Superior region and Alabama. Economies in handling the ore, by means of steam shovels and carriers, and in transporting it by water and railroad, have enabled it to be brought to the heart of the coal and coke regions at comparatively slight expense. In the reduction of the ore and in the various processes of manufacture the American iron makers in recent times have been quick to introduce improvements discovered in other countries; and have themselves contributed important devices by which the efficiency of the labor employed in iron manufacture has been greatly increased.

691. Machinery. — The least valuable part of the iron export is that which leaves the country in the raw or partly manufactured state. The single item of machinery (electrical, sewing machines, locomotives, typewriters, etc.), makes up nearly half the value of the iron and steel exports; while other items (agricultural implements, cars, bicycles, etc.), made up largely of iron and steel, would swell the importance of the exports of iron manufactures still further, if they were included in the list.

The Americans have recently taken the place of leaders among the machine builders of the world, and no country, however high it may have ranked in the past, can afford now to neglect the contributions offered by American machinists. The cheapness of raw materials, iron and steel, has aided the recent development of the American machine industry, but has not caused it. We must look further, to the ingenuity of inventors encouraged by a liberal patent system, and to the genius of business leaders who have known how to make use of the contributions of technical science to industrial efficiency. We must recognize that the Americans got some positive benefit from the fact that they entered late into this part of the field of production. They were not tied to the past by heavy investments, or by methods sanctified by tradition. Finally, we must note again the stimulus of the American market, the broadest and richest in the world, constantly expanding and offering unparalleled rewards to those who met its demands for improved instruments.

692. Copper. — Copper is a metal which has long been prized as one of the components of brass, and which has been still more highly valued since the development of electrical industry has increased the field of its use. Until after the middle of the century, however, the United States had to rely upon foreign countries, chiefly Chile, for most of its supply, and the importance of copper as an article of export dates from recent times. The opening of the mines of the Lake Superior region, the richest copper mines of the world, enabled the country by 1860 to supply the demand for this metal from native sources, and the later development, including new sources of supply in Arizona and Montana, has furnished since 1880 a large surplus for sale abroad. The copper mines of Michigan, which reach a depth of nearly a mile, are said to be the best examples in the world of skilful and economical mining, and improved processes of reduction have made available copper ores which formerly would not pay the working.

693. Petroleum. — Even in colonial times the presence of mineral oil in the country was known by the film which collected on the surface of certain springs, and which took fire when a light was applied to it. A well of oil which spouted fifty feet was discovered on the bank of the Cumberland River in 1830, but, as stated in a book published in 1853, "it was found to be useful only medicinally, and is bottled and exported for that purpose." The interest in this new product, which seemed to offer possibilities beyond its use as a proprietary medicine, led to the organization in 1854 of a "Rock Oil Company"; and the first oil well was driven near Titusville, Pa., four years later. Soon after 1860 the export of oil to foreign countries began, with little idea that the trade thus started was to become one of the great features of American foreign commerce. Mineral oil was in 1913 one of the leading exports of the country, and would take a still larger place in the exports as given at the beginning of this chapter if various by-products, such as paraffin, were included in the figures.

694. Development of the oil industry. — The chief obstacle to the development of the oil trade in its early years was the difficulty of transportation. The extension of the railroad system after 1860 furnished the means of bringing the oil to market with profit, and in recent times the transportation and manufacture of oil products have been developed to wonderfully high efficiency. Tank cars have given place to pipe lines; refineries have been extended and perfected, that the reduction of the crude oil might be carried on with the greatest economy and with full utilization of all by-products; and the market for oil products at home and abroad has been enlarged by a great reduction of prices.

QUESTIONS AND TOPICS

1. Chart the figures, as previously suggested, for comparison with earlier conditions.

2. What other parts of the world come nearest to the Mississippi Valley in quality and quantity of agricultural land? How do they compare in the character of the people, and the facilities for transportation?

3. History of farm machinery. [Quaintance in Pub. Amer. Econ. Assoc., 1904, vol. 5, pp. 799–809; Census, 1900, 10: 341–377; Depew, chap. 50 by Fowler.]

4. Effect of improved farm machinery on production. [Quaintance, pp. 810–826.]

5. Agricultural progress, 1850–1900. [U. S. Census, 1900, 5: xvi–xxxv.]

6. Cultivation of wheat in the U. S. [Edgar, Story, chaps. 7, 8.]

7. The grain trade of the U. S. [Monthly Summary, Jan., 1900.]

8. Grain elevators and warehouses. [Rep. Ind. Comm., 1900, 10: cccxvii–cccxxxix; Monthly Summary, Oct., 1903.]

9. The flour milling industry. [Edgar, Story, chaps. 10, 11; Depew, chap. 39 by Pillsbury; U. S. Census.

10. What are the various products obtained from maize? [Encyc.; commercial geographies.]

11. The packing industry. [Depew, chap. 55 by Armour; Census, 1900, 9: 385–429, 1910, 10: 333–353.]

12. The dairy industry. [Census, 1900, 5: clxv–clxxxvi; Rep. Ind. Comm., 1900, 6: 268–296.]

13. Economic effect of the Civil War on the South [Cambridge Mod. hist., vol. 7, chap. 19 by Schwab; Rhodes, Hist. U. S.]

14. The cultivation of cotton since 1860. [Hammond, pp. 120–228.]

15. Recent development of the cotton trade. [Hammond, pp. 324–350; U. S. Mo. Summary, March, 1900; Depew, chap. 34 by Edmonds.]

16. By-products of the cotton industry. [Depew, chap. 67 by Chaney; Census, 1900, 9: 585–594.]

17. Recent history of the Virginia tobacco industry. [B. W. Arnold, History, Baltimore, 1897, $.50.]

18. Recent development of the American iron industry. [Depew, chap. 46 by Huston; Crowell in International Monthly, 1901, 4: 211–250; Census, 1900, 7: cxlix, 10: 1–77; Monthly Summary, Aug., 1900.]

19. The steel industry. [Hatfield, Lectures, 131 ff.; Thurston in Century Magazine, 1900–1901, 61: 562–568.]

20. The mining of iron ore. [Fawcett in Century Magazine, 1900–1901, 61: 712–725; Census, Mines, 1902, pp. 393–431.]

21. The transportation of iron. [Fawcett in Century Magazine, 1900–1901, 61: 851–863.]

22. Write a report on one of the following topics, using volumes of the U. S. Census, Manufactures, Reports for principal industries.

(*a*) Manufacture of machine tools.
(*b*) Sewing machines.
(*c*) Typewriters.
(*d*) Watches.

23. Development of the American copper industry. [Depew, chap. 47 by Cowles; chap. 27, p. 182, by Rothwell; Census, Mines, 1902, 467–506.]

24. The uses and production of petroleum. [Census, 1880, vol. 10, first monograph; Mines, 1902, pp. 719–764; Encyc.]

25. Development of the American oil industry. [Depew, chap. 31 by Folger; G. H. Montague, The Standard Oil Company, N. Y., Harper, 1903.]

BIBLIOGRAPHY

See chapter li.

CHAPTER LIII

IMPORTS, POLICY, DIRECTION OF COMMERCE, 1860–1914

695. Survey of the import trade, 1860–1914. — The development of the import trade of the United States since 1860 is shown in the following table, which gives the values in millions of dollars of merchandise imported:

	1860		1913	
	Value	Per cent	Value	Per cent
Foodstuffs, crude	36	10	212	12
Foodstuffs, manufactured	54	15	194	11
Raw materials for manufacture	37	10	635	35
Manufactures for further use in manufacture	24	7	349	19
Manufactures ready for consumption	200	57	408	23
Total, incl. miscellaneous	534		1,813	

696. Changes in the character of imports. — The percentages of the table furnish a ready means of comparing the relative importance of different classes of imports at the beginning and end of the period. The most striking change is the decline in importance of the class of manufactured articles ready for consumption, which amounted to over one half of the total value of imports in 1860, and sank to less than one quarter in 1913. The indication here given that the country was learning to supply its need for manufactured wares, without depending so much as previously on foreign producers, is confirmed by another item in the table, giving the imports of raw materials for domestic industries. This item increased greatly in importance in the course of the period, and took now the place which was formerly held by the item of finished manufactures. We now imported raw materials and made the goods at home, instead of sending abroad for the finished product.

697. Character of foods imported. — The large item of food supplies imported would seem to show that the United States resembled the countries of western Europe in being unable to nourish its population from its own resources. Such an idea would be wide of the facts. The figures of the previous chapter have shown that the country could spare for export immense quantities of the staple foods, such as wheat and meat, and the item of food imports covered mainly luxuries, which the country could afford to buy abroad in increasing quantities as it gained in spending power. We may take as characteristic the case of the so-called Zante currants, seedless raisins which are used in cakes, puddings, etc., and which are so clearly a superfluous luxury that in England they are made the object of a revenue tax. The imports of Zante currants into the United States were small and scattering before the Civil War, rarely exceeding a thousand tons in a year. The imports rose rapidly to five thousand tons after the war, and at the close of the century were about fifteen thousand, in spite of the fact that part of the supply was now raised in the country, and imports were restricted by protective duties. Other similar cases might be mentioned to show the peculiar character of our food imports.

698. Question of producing these foods in the United States. Sugar. — The chief items among the imported foods were the products of tropical or semi-tropical agriculture, their values in millions of dollars being as follows in 1913: coffee 119, sugar 104, fruits and nuts 43, tea 17, cacao 17. Some of these articles could be produced in this country, and would undoubtedly be grown at home if they could not be procured so cheaply abroad. In general it has paid the American farmer better to cultivate crops like cotton and wheat, which are peculiarly adapted to the conditions of soil, climate, and labor in the United States, rather than those crops which can be grown as well or better abroad.

There has been a determined effort, lasting for more than a century, to raise the necessary supplies of sugar at home. The growing of sugar cane was an established industry in Louisiana by 1800, and has been continued ever since in that State. During most of the time the industry has received the help of protective duties or of bounties, but it suffers in this country from the danger of early frosts, and it has never grown strong enough to relieve the United States from dependence on foreign sources of supply.

Better prospects seem to favor the beet-sugar industry. Sugar-beets were first grown successfully on a commercial scale in California about 1890. Since that time the culture of sugar-beets spread to the prairie and mountain States, and after 1907 beets furnished more sugar than American cane. Including all sources of supply, however, the sugar product of the continental United States was still less than one quarter of the amount required by the people.

699. Increase in raw materials imported. — Turning now to other classes of imports we are faced by the great increase in articles, both crude and manufactured, used to supply the needs not of consumers but of producers. Articles of this character had always formed a part of our imports, but the growing use of them in this period is clear testimony to the internal development of the country. American industries, which previously had attained strength only when they were supported by a generous supply of raw materials close at hand, were prepared now to reach out to all parts of the world for the supplies which they required.

It is significant, also, that the great increase in these supplies took the form of raw materials. Articles wholly or partially manufactured were imported still for use in American industries. These articles were of many different kinds; to name one very important class, that of chemicals and dyes, will suggest their general character. These articles increased greatly both in absolute value and in relative importance, but in neither respect did they keep pace with the increase of crude materials imported.

700. The chief raw materials among imports. — Of the raw materials imported for domestic industries in 1913 nearly five sixths in value were comprised in the wares enumerated in this section. Values are stated in round millions of dollars.

The revolution in the metal trade of the country since 1860 is shown by the fact that tin was the only metal which was imported in the crude state in considerable quantities (53 millions); the country could now supply itself with most of the necessary mineral substances. An exception must, however, be made in the case of precious stones, 50. Of the products of the animal and vegetable kingdoms the raw materials for the textile industry were most prominent. The first place was taken by raw silk, 85; then follow the vegetable fibers, 49 (sisal grass, Manila hemp, jute, flax); wool, 36, cotton, 23. The single item of greatest value in the whole list was that of hides, 117; while India rubber, 101, represented the importance of an industry that was still comparatively new, but that was rapidly growing to a place of prominence.

701. Decline in importance of finished manufactures imported. — While the imports of raw materials increased greatly in value, the imports of finished manufactures, ready for the consumer, showed a great relative decline. Taking first the textiles, the most important group among the finished manufactures imported, we find that the total value in 1913 was indeed greater than the value in 1860, but the increase was only about two-thirds while the increase in the import trade as a whole was over four-fold. In round millions the value of the manufactures imported was as follows in 1913: cotton 60, vegetable fibers and grasses 77, silk 31, wool 16. Between the two dates there had been a great growth of population and of wealth in the country, but the increase in consumption was met mainly by the development of home manufactures. The list of textile raw materials imported for manufacture in America, given in the preceding section, shows a great gain in every staple. The growth of domestic manufactures had caused in the case of two important textiles, wool and silk, an absolute decline in the value of the manufactured imports; while the only case of a great increase is to be noted in the manufactures of the vegetable fibers, jute, etc., which had not come into extensive use until after the middle of the century.

702. Variety of imported manufactures. — If we seek to explore the imports of manufactures, outside the single group of the textiles, we are confronted by the same bewildering variety of articles as in previous periods. We find earthenware, china, and glass; jewelry, clocks, works of art, and books; paper and leather wares; matting, manufactured furs, and various manufactures of metal. Roughly, a round dozen of articles like those named above can be found, of which each showed imports ranging in value from two or three to ten or more millions of dollars.

It is probable that the United States will always continue to import manufactured wares like those named above, in great variety and amounting in the total to considerable value. We cannot afford to refuse the contributions of peoples who have specialized in various lines, and by reason of inherited taste and skill, or with the aid of exceptional natural resources, can offer us what we cannot readily produce ourselves. Since 1860, however, we have come to depend less and less on our foreign trade for the manufactures which serve the simpler household needs, and the home product of many of the wares named greatly exceeds the amount imported from abroad.

703. Change in tariff policy since the Civil War. — The growth of American manufactures, to which I have alluded frequently in preceding sections, has often been explained by the change in tariff policy which came at the time of the Civil War. The reader must look in other books for a discussion of that question, on which opinions differ so widely. I shall attempt here merely a brief summary of our recent tariff history.

At the outbreak of the war a tariff with moderate protective duties was in force. The strain of the conflict forced the government at Washington to adopt every available means of raising revenue. Heavy taxes were laid on manufacturers and other producers in the country, and the tariff was raised, to secure increased revenue from the importers and consumers of foreign wares. Such an increase was necessary, not only to raise revenue but also to enable the American manufacturers to hold their own in the home market, in spite of the taxes which they paid. Actually, however, the increase was greater than was necessary for these purposes, and by the act of 1864 the average rate on dutiable commodities had risen to nearly 50 per cent.

704. Increase in protective duties. — The high duties of the war period were imposed with the idea that they should be repealed when the war was over and the country had returned to normal business conditions. At the return of peace, however, when the internal taxes on manufactures were repealed, and the peculiar conditions which had formed the occasion for the high tariff no longer existed, the protective duties were kept unchanged or were actually raised. The people in general did not pay so much attention to the tariff as to other questions of politics, and did not realize that it was a tax on them as consumers; while the manufacturers vigorously opposed any reduction. Duties which had been raised by 10 per cent to 30 per cent during the war were kept at the higher level which they had reached, and duties on some special articles were arranged so that they furnished the unprecedented protection of 100 per cent or even 150 per cent. The duty on steel rails, for example, amounted to more than the cost of the product which England was ready to sell us, and Americans who built railroads about 1880 had to pay $61 to $67 per ton for rails which could have been purchased in England for $31 to $36.

705. The tariff at the close of the century. — After 1880 a reduction of the tariff was seriously urged by various individuals and parties in the country. The tariff was changed in details, but the general tendency was rather toward increase than reduction of the protective duties. At the close of the century the average duty was not far from 50 per cent of the value of the goods. The British Board of Trade estimated that the important wares imported into this country from England paid about 70 per cent. Such a high tariff was unheard of in earlier times, in the United States or in Europe; and was exceeded in 1900 only by the tariff of Russia. The Payne-Aldrich act of 1909, the first general revision of the tariff that had taken place for twelve years, amended some details but left its general character unchanged; the Underwood act of 1913 went further, and is credited by a competent authority with making the greatest change in the tariff system since the Civil War. It made considerable reductions on some items, but left rates as high as before on about half of the chief dutiable commodities imported. Before the effect of this last measure could fairly be judged the outbreak of the war in Europe set loose forces which changed the currents of the world's trade with little regard to the policies of lawmakers.

706. Leading ports, 1860–1914. — The continued importance of the eastern seaboard, in the foreign trade of the country, is shown by the fact that in 1913 nearly two-thirds (64 per cent) of the total commerce in merchandise passed through the Atlantic ports. It should however be noted that these ports were declining in relative importance; in 1900 they enjoyed nearly three quarters (73 per cent) of the whole. Next in rank were the ports of the Gulf of Mexico (1913, 15 per cent), and the customs houses on the northern frontier, (12 per cent) commerce by the southern and northern gateways was growing more rapidly than the old established trade by the Atlantic. In comparison the trade of the Pacific Coast (6 per cent) was unimportant.

The port of New York still stood without a rival in importance. Over one half of the total imports was received through its harbor, and though its share of exports was smaller, it conducted nearly half (46 per cent) of the total trade of the country. No other port had as much as 10 per cent. New York stood even higher, however, in the middle of the period (56 per cent in 1882), and the tendency of recent years had been to distribute among other ports an increasing share of our great foreign trade. The concentration of traffic at the New York gateway had apparently led to congestion, entailing heavy charges and delays, and encouraging the use of transportation lines to other ports whose facilities were not so thoroughly exploited. There have been many changes in the relative standing of the individual ports; the order of their importance in 1913 was as follows, the figures giving the percentage of the total commerce of the country (values of merchandise imports and exports) passing through each: Galveston, 7; New Orleans, 6; Boston, 5; Philadelphia, 4; Baltimore, San Francisco, and Puget Sound, 3 each. The Gulf ports owed their position mainly to their export trade, in which cotton was the leading item; the secondary ports on the Atlantic seaboard had a more diversified traffic, by which the pressure on the port of New York was somewhat relieved.

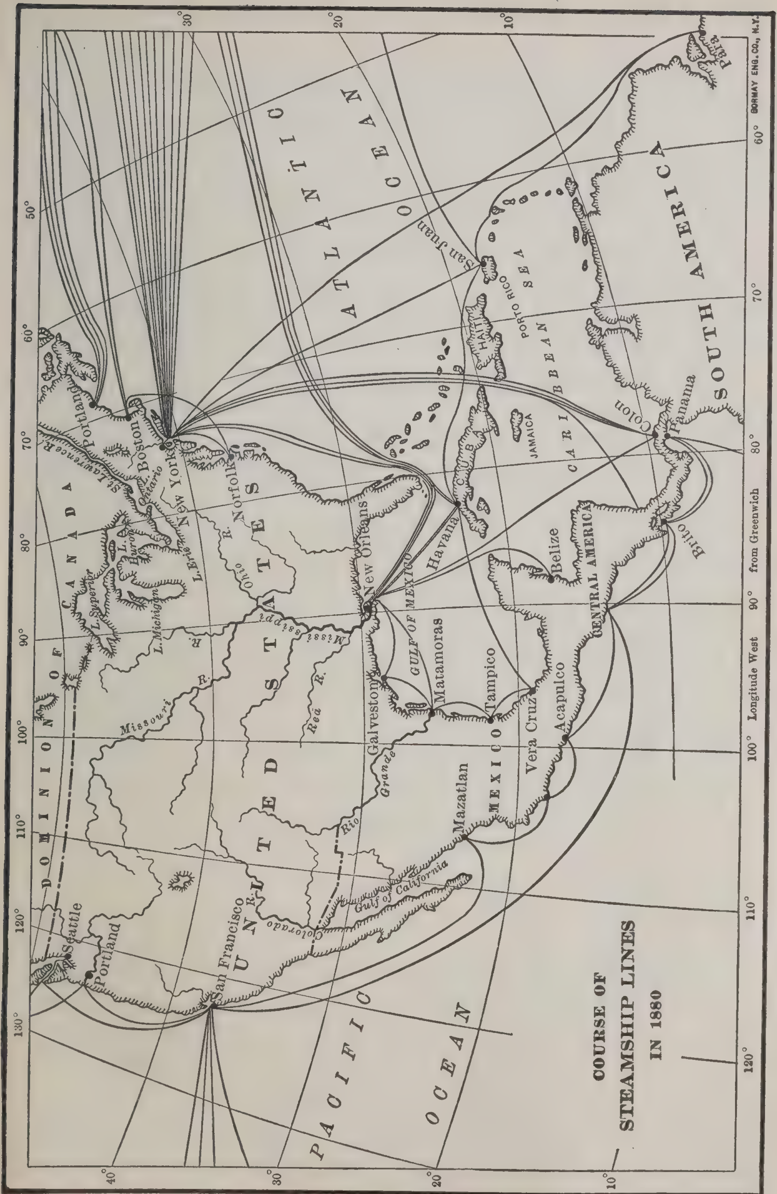
707. Direction of commerce abroad. — The changes in the distribution of our foreign trade from 1860 to 1913 are apparent in the following table, which gives the *percentage*, in round numbers, of the total exports and imports of the United States in its commerce with the great divisions of the world. For convenience of comparison the figures for 1800 are included:

	Imports of U.S. from —			Exports of U.S. to —		
	1800	1860	1913	1800	1860	1913
Europe	51	60	49	58	78	60
North America	35	21	20	38	13	25
South America	—	10	12	—	4	6
Asia	13	7	15	2	3	5
Oceania	—	1	2	—	1	3
Africa	1	1	1	2	1	1

708. Relative commercial importance of different parts of the world. — The figures bring out in a striking manner the close connection of commerce and civilization. The continent of Europe, in spite of its small area and in spite of its inferiority to Asia in population, contributed far more than half of our commerce throughout the century. The proportion of our trade with Europe grew during the first part of the century, to decline again during the latter part, leaving the figures for 1913 very nearly equal to those of 1800. The percentage share of imports from Europe reached its peak before the Civil War (1850, 70 per cent); the greatest concentration of exports in the direction of Europe came later (1880, 86 per cent). Even in 1913 the trade with Europe exceeded in importance that with all other parts of the world together.

The commerce with our immediate neighbors in North America shrank in importance in the first half of the nineteenth century, when the countries of this continent were rivals in the export of raw materials to Europe, but showed a recovery in more recent years, when the diversification of industries in the United States encouraged exports from this country of a kind that had formerly been obtained from the Old World. In comparison with these two most important parts of our trade the remaining branches showed a gain, but one which was in absolute figures so small that it gave no reason to expect any sweeping change in the direction of our commercial interests. In the markets of South America and Asia we appeared still as buyers rather than sellers, importing from those continents special foodstuffs and raw materials for industry, but exporting to them a relatively small share of our own products. Trade with Oceania and Africa had grown, with the growth of a civilized population in those parts, but remained still only a small fraction of our aggregate commerce.

709. Importance of the English trade. — England still headed the list of the countries with which we traded. Our imports from the United Kingdom in 1913 formed 16 per cent of our total import trade, exceeding, therefore, our imports



COURSE OF STEAMSHIP LINES IN 1880

BORMAY ENG. CO., N.Y.

from the whole continent of Asia or from the continents of South America, Oceania and Africa together; while our exports to the United Kingdom formed nearly one quarter (24 per cent) of the total exports, and exceeded the aggregate of our exports to all four continents named above. The country which stood next in importance in our commercial relations in 1913 was another English-speaking country, our Canadian neighbor, and the value of our commerce with these two members of the British Empire was almost exactly one-third of the total value of our foreign trade.

710. Trade with other countries: Europe. — The relative importance of other countries in their commercial relations with the United States can be seen in the following list, which gives the share each took in our total commerce in merchandise in 1913: United Kingdom, 21 per cent; Canada, 13; Germany, 12; France, 7; Cuba, 5; Netherland, Brazil and Japan, 4 each; Mexico, British East India, Italy and Belgium, 3 each. An extension of this list would confuse rather than aid the student. If we divide the twelve countries named into groups of four we find that the first group, four countries, accounted for more than one half of our total commerce; the first two groups, eight countries, accounted for more than two-thirds; the whole twelve together accounted for more than three-quarters.

Among the European states we note that France had not kept her place of relative importance; commerce with that country had grown but slowly, and Germany had won precedence among our customers in Continental Europe by her high industrial development and her growing demand for our raw materials. Reviewing the other states of Europe the reader will note the absence from the list of the great empires of Russia and Austria-Hungary, and the presence of such little states as the Netherlands and Belgium. Area and population are obviously factors which have no decisive influence on the commercial importance of a country.

711. The Americas and Asia. — Attention has already been directed to the fact that although the major part of our commercial interests still lay in Europe the concentration of our interests there had grown gradually less with the passage of time. The reader will note the evidence of this tendency to dispersion in the fact that of the twelve countries named as the most important in their commercial relations with the United States in 1913, six were extra-European. Two of these were our immediate neighbors in North America; exchange with these countries became more active as the United States took on the character of an industrial state, offering finished products for the raw materials of industry. The other two American states on the list owed the importance of their position in our trade largely to their ability to meet special demands of the American consumer, for sugar and for coffee respectively. These and other states to the south of us made relatively small purchases in the American market. Our relations with British East India were of the same kind; that group of countries bought from us in 1913 less than one tenth of the value of the products (coarse textile fibers, burlap, skins, etc.) which it sold to the American importer. A tendency similar but less marked showed itself in the trade with Japan which supplied 5 per cent of the total American imports, but took less than 3 per cent of our exports. Noteworthy is the absence from the list of China, numbering over three hundred million inhabitants, but accounting for less than 2 per cent of the trade of the United States in 1913.

QUESTIONS AND TOPICS

1. Chart the figures, sect. 695, and note the changes in the *relative* as well as the absolute importance of different classes of imports.

2. Contrast the import trade of the United States in 1913 with that of England or of Germany. Study the indications of trade between the U. S. and other countries given by these comparisons.

3. The decline in import of manufactured wares implied either that the country was growing poorer, and so was unable to buy finished products abroad, or else was growing more competent to supply its own needs. Which is the correct view?

4. What food supplies, used in the household in which you live, come from foreign countries?

5. Has there been any change in the relative amount of foreign food products consumed in your household in the past generation?

6. If an American farmer can get more sugar by raising cotton or wheat and exchanging his surplus, is there any reason why he should raise sugar?

7. The American cane sugar industry. [Depew, chap. 37 by Searles; Pub. Amer. Econ. Assoc., 1904, 5: 79–98; Census, 1900, 6: 443–494; 1910, 10: 477–483; U. S. Bureau of Manufactures, Misc. Series, no. 53, 1917.]

8. The beet sugar industry. [Census, 1900, 9: 543–555; 1910, 10; 471–477; Rep. Ind. Comm., 1900, 10: ccli–cclxxiv; House Doc. 396, 55th Cong., 2d Session; Poole's Index.]

9. The chemical industry of the U. S. [Depew, chap. 63 by Bowers: Census, 1880, 2: 985–1028; 1900, 7: clii, 10: 523–569; 1910, 10: 531–550; Bureau of Foreign and Dom. Commerce, Misc. Series, no. 82, 1919.]

10. Write a report on the history, sources of supply, commerce and uses, of one of the raw materials mentioned in sect. 700. [Encyc., commercial geographies, U. S. Census.]

11. Write a report on one of the following industries, with respect to production at home and importation from abroad:

(*a*) Glass. [Depew, chap. 40 by Gillinder; Census, 1880, 2: 1029–1152, 1900, 9: 947 ff.; 1910, 10: 975–884; U. S. Bureau of manufactures, Misc. Series, no. 60, 1917.]

(*b*) Earthenware and potteries. [Depew, chap. 41 by Moses; Census, 1900, 9: 899 ff.; 1910, 10: 849–871; U. S. Bureau of Manufactures, Misc. Series, no. 16, no. 21.]

(*c*) Hides and manufactures of leather. [Depew, chap. 75 by Foerderer; Census, 1900, 9: 699–738; 1910, 10: 717–732.]

(*d*) Boots and shoes. Depew, chap. 87 by Rice; Census, 1900, 9: 739–767; 1910, 10: 697–714; U. S. Bureau For. and Dom. Commerce, Misc. Series, no. 76.]

[See Depew and Census for many other industries; see Statistical Abstract for exports and imports of products of industries.]

12. Study in detail one of the following chapters in recent tariff policy:

(*a*) The war tariff.
(*b*) The failure to reduce the tariff after the war.
(*c*) Increase of duties above war rates.
(*d*) The Act of 1883.
(*e*) The Act of 1890 (McKinley Tariff).

(*f*) The Act of 1894 (Wilson Tariff).
(*g*) The Act of 1897 (Dingley Tariff).
(*h*) The Act of 1909 (Payne-Aldrich).
(*i*) The Act of 1913 (Underwood).

[Taussig or Mayo-Smith and Seligman. The student may also consult tariff histories by Stanwood, Rabbeno, etc., narrative histories and contemporary periodical articles.]

13. The following figures give, in millions of dollars, the commerce in merchandise passing through the eight principal ports in 1900. On a sketch map of the country draw lines from the different ports proportional to the figures and extending out to sea; thus giving graphic representation of relative importance of the ports. The first figure is that of imports, the second that of exports. New York, 1,048, 918; Galveston, 8, 281; New Orleans, 82, 170; Boston, 147, 70; Philadelphia, 93, 76; Baltimore, 33, 116; San Francisco, 63, 66; Puget Sound, 51, 63.

14. The figures, sect. 707, may best be charted by the use of colored crayons, giving each grand division its own color. Draw a line composed of 100 equal units, by the use of dividers or a scale; a foot rule, divided into sixteenths of an inch, may be employed, making the line $6\frac{1}{4}$ inches long ($16 \times 6\frac{1}{4} = 100$). Chart imports and exports separately, and study the charts as representing the *relative* importance of our trade with the different continents at different periods.

15. Note carefully that the figures of the text, page 585, are percentages, not total values. The total values are given below, with a slight difference of arrangement; each unit of the figures represents ten million dollars, and dashes are inserted when the values do not come within one decimal place of a unit.

(Units of ten million dollars.)

	1800		1860		1913	
	Imports	Exports	Imports	Exports	Imports	Exports
Europe..........	5	4	22	31	89	148
North America...	3	3	8	5	36	62
Asia............	1	0.1	3	1	28	12
South America...	—	—	4	2	22	15
Oceania.........	—	—	0.3	0.5	4	8
Africa..........	0.1	0.1	0.4	0.3	3	3

To illustrate the use of the figures: the imports from Oceania in 1860 were roughly three million dollars in value, in 1913, forty millions (the precise figure was $37,543,441).

The figures may be used in studying our commercial relations in the following ways:

(*a*) To show the development of our commerce with different continents take three large sheets of paper, for the three different dates. Lay off the largest figures (Europe, 1913, 89 imports plus 148 exports) to a convenient scale at the top of one sheet, and below it draw other lines showing the total commerce with each of the other grand divisions at that date. Distinguish either imports or exports by the use of wavy or dotted lines. Prepare the other charts, using the same scale. These charts will show the *growth* of American commerce, while the charts based on figures in the text show only changes in *proportion*.

(*b*) To show the relative commercial importance of the continents (excluding Oceania) at a certain time, as in 1913, the following method may be adopted. Rule a sheet of paper in equal squares, or procure a sheet of plotting paper already ruled. Draw on the paper a map of Europe to such a scale that the land area will include as nearly as possible 237 squares (89 imports plus 148 exports.) Exactness is impracticable, but a few experiments should make the result sufficiently accurate; an error of 10 or 20 squares is of little importance. Draw then the maps of the other continents so that each one contains the number of squares corresponding to its share in our trade (North America, exclusive of U. S., 98; Asia, 40; South America, 37, etc.). The contrast between the continents will be sufficiently striking even if other maps, showing the continents in their true proportions, are not made for comparison.

16. Methods similar to those already employed may be used in studying the commerce of the U. S. with separate countries. Full statistical information is comprised in the Reports on Commerce and Navigations.

BIBLIOGRAPHY

See chapter li.

TOPICS FOR REVIEW

The following topics are suggested for use in a general review of American commerce: (*a*) history of American shipping; (*b*) transportation by road, river, canal and lake; (*c*) transportation by railroad; (*d*) production and exchange of wheat and flour; (*e*) cotton; (*f*) animal products; (*g*) textiles, (cotton, wool, silk); (*h*) iron and steel; (*i*) other mineral products; (*j*) commerce with European countries; (*k*) commerce with Asia; (*l*) commerce with the West Indies and South America; (*m*) history of American seaports; (*n*) tariff history.

PART VI.—THE WORLD WAR

CHAPTER LIV

COMMERCE AND THE WORLD WAR, 1914–1918

712. Commercial antecedents of the war. — To picture the World War of 1914–18 as a necessary result of the commercial conditions in the period immediately preceding would be a distortion of the facts. The recourse to arms is a voluntary act, and this war, like others preceding it, would not have taken place if one party to it had not consciously chosen to use force to obtain what it wanted. War is never a necessary and inevitable result of economic conditions. On the other hand, there are periods in which commercial competition is so intense that it puts a strain on international relations, tempting one or another party in the struggle to further the interests of its people by threats of force or by force itself. The economic strain is particularly likely to lead to rupture if the political system of the period is faulty, if international politics provide no effective way for the just settlement of differences, and if national politics fail to represent the interests of the people as a whole but sacrifice these to the selfish interests of a group. Keen competition does not cause war, but keen competition and faulty politics in combination are apt to do so.

713. Germany and the outbreak of war. — The danger-spot in the international situation before 1914 was Germany. That country had achieved extraordinary success in its recent economic development. Its progress, moreover, was due only in minor degree to its endowment of natural resources; it proceeded from the industrial virtues of the people, from the efficiency of the organization, and from the leadership of scientific experts. The Germans were proud, and had a right to be proud, of their success. They could not complain of the reward which had been accorded them. They were troubled, however, about their future. They had come to depend upon world-trade, and found the world largely under the political control of rival states. It is true that in that very world they enjoyed abounding prosperity; but the foundations of their prosperity appeared to them uncertain. Inheriting antiquated ideas about the power of the state to guide economic development and to further commercial interests, they imputed to other countries political designs which were the products of their own peculiar ways of thought. They saw in the high tariffs of the United States and Russia, in the spread of the idea of a customs union in the British Empire, in the expansion of French influence in Morocco, so many evidences of a plan of their rivals to hem them in, and misuse political power to rob them of their deserts. Should they not, before it was too late, "break through the iron circle," establish a great state in central Europe extending down to the Mediterranean and the Persian Gulf, take the place in "world-politics" which accorded with their economic merits, and so — for this was the sincere conviction of many Germans — not merely win their own "place in the sun," but also direct in the right path the civilization of the world as a whole? Given the prevalence of ideas like these, given an antiquated political system that allowed exaggerated influence to dynastic and military interests, and the forces impelling Germany to war were strong; given the old-fashioned and outworn system of international diplomacy, the stress was irresistible and the rupture came.

714. Direct costs of the war.— For generations to come the effects of the World War will be working themselves out. This chapter and the following will attempt merely a survey of some of the more obvious effects upon the history of commerce. It will be convenient to have at hand for reference some estimates of the costs of the war, and the table gives those that were represented by the direct expenditure of money by the states involved. Some of the states advanced funds to their allies for the prosecution of the war, so a distinction is made between the gross sums raised, and the sums directly expended by each country; the cost of the war would be exaggerated if the same sum were counted twice. On the other hand it is apparent that the table of net cost is an accurate measure of the burden of the war on different countries only on condition that the advances to allies are treated as interest-bearing loans. To assist in an appreciation of the meaning of the costs estimates are supplied for some countries of the total national wealth in 1914.

(*Approximate figures in milliards of dollars*)

	National wealth	Gross cost	Advances to allies	Net cost
United States	204	32	9	23
United Kingdom	71	44	9	35
Rest of British Empire	...	4	..	4
France	58	26	2	24
Russia	58	23	..	23
Italy	22	12	..	12
Other Entente allies	...	4	..	4
Total	...	145	20	125
Germany	81	40	2	38
Austria-Hungary	30	21	..	21
Turkey and Bulgaria	...	2	..	2
Total	...	63	2	61
Grand total	...	208	22	186

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715. Indirect costs of the war. — Even the figures of direct costs are subject to correction on various accounts, and must be taken merely as approximate indications of the value of the wealth that was devoted to destruction. Still more uncertain, necessarily, are the estimates of losses due to the war which were not recorded in the expenditures of governments. Figures in the accompanying table give some idea of the nature and extent of these indirect costs.

INDIRECT COSTS OF THE WAR

(Figures in milliards of dollars)

Money value of lives lost, military	34
Money value of lives lost, civilian	34
Property losses on land	30
Property losses at sea	7
Loss of production by diversion of labor	45
Voluntary war relief	1
Loss to neutrals	2
Total	153
Grand total, direct and indirect costs	339

A few words of explanation will make some of the items more clear. Human beings have not, since the days of slavery, been counted in a census of national wealth, but they represent nevertheless in every country the heaviest investment and the largest source of income. The figures in the text are based on the assumption of about 13 million deaths in military service, and a money value of the individual ranging from about $2,000 (southern and eastern Europe) to $5,000 (United States). The assumption that the war caused at least as heavy a loss in the civil as in the military population is probably conservative. The loss due to the diversion of labor from production is figured on the basis of 20 million men, of an average productive capacity of $500 a year, withdrawn from industry for four and one half years.

716. Effects of the war on commerce. — In a modern country there is a small group of men known as wreckers, whose business it is to tear down and destroy. During the war the world went into the wrecking business on a grand scale. The figure of twenty million men engaged in it is an average for the whole period; at the close of the war nearly double that number were under arms. We have now to study some of the effects of this situation on commerce.

In every country that entered the war there was an immediate and imperative demand for the tools of the wrecking trade, first of all for guns and ammunition. The wrecker was engaged in an arduous occupation; he demanded more food than he had been used to consume, and wasted more; he used up clothes and shoes and implements at an appalling rate; he was always on the road, requiring subsistence and shelter in all sorts of out-of-the-way places. War therefore put an immediate strain on the industries serving these needs: chemical, metallurgical, agricultural, textile, and the industries providing and operating the equipment of transportation on land and water. On the other hand war withdrew workers from constructive industry, and restricted supply at the very time it intensified demand. Every country at war, therefore, sought by means of commerce to relieve the strain on its own resources, importing needed supplies from abroad; each group of belligerents sought to prevent the other group from profiting by this process. The tendency to an increase of imports was accompanied by a tendency to a decline in exports. A country at war could not afford to do business as usual in its foreign trade. If it could supply its military necessities by paying actual cash for its imports, or by promising to pay for them at some future time, it could withdraw workers from export industries, serving the needs of foreigners, and make them serve more pressing needs at home.

717. Commercial position of the Central Powers and of the Entente. — Germany and her allies, Austria-Hungary, Bulgaria, Turkey, enjoyed a great military advantage of which the character is suggested by their name, the Central Powers; they had interior lines of communication and could move their forces from one to another front much more easily than could their opponents. They would have enjoyed a corresponding commercial advantage if they could have brought the war to a conclusion with stocks of supplies accumulated at home or acquired in invaded territory, which they could mobilize in one part or another of their territory as they pleased. The powers of the Entente, on the other hand, desired in vain to effect an exchange of the wheat of Russia for the guns and ammunition of France or England. In a long war, however, in which the decision was to be effected not by stocks accumulated in the countries immediately engaged but by a mobilization of the resources and activities of the whole world, the Central Powers were at a critical disadvantage. They had immediately open to them only the territory of small neutral states (the Netherlands, Switzerland, the Scandinavian states); the path to richer sources of supply lay across the sea; and control of the sea rested, from the beginning to the end of the war, in the hands of the Entente.

718. The war against commerce. — The conditions were much like those of a hundred years before, when England was engaged in the desperate struggle with Napoleon. In neither period had the belligerents any scruple in departing from established principles of international law. The Entente proposed to starve Germany into surrender. It stopped the outlets of Germany across the territory of neutral states by edicts which amounted in substance to a rationing of the people of those states; these people might have enough food, fodder, cotton, etc., for their own immediate needs, but no surplus that they might transfer to Germany. Germany protested against this infraction of the principle of freedom of the seas, and retaliated by proclaiming a war zone about the British islands, within which German submarines ruthlessly destroyed the merchant shipping on which England depended for her supply of food. These measures on either side, took shape in the early years of the war. The measures of the Entente were effective in sealing the Central Powers from commercial intercourse with the outside world. The German policy failed. It remained a menace, which grew more serious in the latter part of the war when the danger to England was very real, but in its moral influence, instead of breaking the spirit of the English, it did much to rouse the spirit of neutral countries. As the occasion for the entry into the war of the United States on the side of the Entente it was a decisive factor in bringing the conflict to a conclusion.

719. The war on shipping. — The war on shipping resulted in the destruction by enemy action of a tonnage amounting to more than one quarter of the world's total tonnage in 1914. The figures in the following table indicate the extent and distribution of the losses, and show at the same time how rapidly they were repaired by the construction of new ships. Changes in the relative standing of the different countries were affected also by another factor, namely by the distribution among other countries of ships of the Central Powers, taken during and after the war. Germany was second in rank among maritime nations in 1914, with a tonnage of 5.5 million; in 1920 its tonnage had been reduced to less than 1 million, almost entirely by forced transfer.

(Figures in millions of gross tons)

	Tonnage, 1914	War losses	Tonnage, 1920
United Kingdom	21.0	7.8	20.6
United States *	5.4	0.4	16.0
France	2.3	0.9	3.2
Japan	1.7	0.1	3.0
Italy	1.7	0.8	2.2
Norway	2.5	1.2	2.2
Total of these items	34.6	11.2	47.2
Total for world	49.1	13.0	57.3

* The figures of the table, quoted from Lloyd's Register in Report U.S. Department of Commerce, 1920, p. 170, differ slightly from U.S. official figures. It should be noted that the gross tonnage of American vessels employed in foreign trade was very much less: 1.0 million in 1914, 9.9 million in 1920, according to official figures.

720. Influence of the war on the issue of paper money. — War is itself abnormal. Naturally, the World War gave a peculiar cast to the commerce of the period and left behind it commercial conditions very different from those that had prevailed in the earlier period of peace. These results of the war involve reference to questions of currency and foreign exchange which can be treated only superficially in a book on the history of commerce, but which were of such practical importance that they cannot be omitted altogether.

The governments involved in the war had, of course, to strain every resource to get the funds for their necessary expenditures. An expedient which they all adopted was the issue of paper money. Let us consider, to illustrate the matter, the case of a country which had been doing business with a gold currency of say 100, using that figure to express the number of million francs, marks, dollars or other unit. If the government now printed 10 of paper money and used these to meet its extraordinary expenses, there would be a total of 110 in circulation. Price would rise roughly to correspond; that is, the unit would buy less than before. The gold unit would, however, be worth roughly as much in other countries as it was before, and would be sent abroad to make purchases, instead of being used at home where its purchasing power was diluted, as it were, by the issue of the paper units. After a period of readjustment 10 of gold would have gone out; the currency would have returned to its former level. The government has made a net gain of 10, for the paper money cost practically nothing to print. Has anybody lost? No; not if the paper money circulates readily at home, and does the work which an equal amount of gold money had formerly done. The country has simply "realized" part of its gold stock, using a cheap substitute for money purposes, and selling the dear gold to other people who were glad to exchange products for it.

721. Effect upon the flow of gold. — From the very beginning of the war the governments of the European states practised this expedient, paying out paper money and getting in return for it the goods and services which they needed for military operations. Gold went out of circulation and was replaced by paper. The government did not choose, however, to let private individuals profit by the exchange of this gold with people abroad. By an appeal to patriotism and by the threat of penalties each government sought to bring into its own treasury * the gold which had been in the pockets and in the cash-boxes of its people. It opened the way for the circulation of its paper as well by locking up gold in its vaults as by sending it abroad. It cherished the gold as a precious asset: a sign of solvency and a ready resource in time of need. The gold reserves of some of the belligerents increased considerably in the course of the war.

GOLD RESERVES OF EUROPEAN BELLIGERENTS

(Figures in millions of dollars)

	1913	*1918*
United Kingdom	170	528
France	679	664
Italy	288	244
Germany	279	539
Austria-Hungary	251	53

These gold reserves, as the name implies, were *not* in active circulation. Gold passed entirely out of circulation. It flowed into the treasury, and part of it was retained there. The larger part flowed *through* the treasury, and was employed by the government in purchase of war material abroad. Some part of this outflow from the belligerent states remained in Europe; Spain and the Netherlands showed in the course of the war a notable increase in their gold holdings. By far the greater part of the gold left Europe altogether, most of it going to the United States, very considerable amounts going to the Far East and to South America.

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* I do not pretend to recognize technical distinctions in this elementary exposition.

722. Over-issue of paper money; worldwide inflation. — Let us return now to a consideration of the case which was assumed to illustrate the working of paper money. If we suppose the government issues 10 units, 20 units, and so on up to 100 units we may assume in each case that a corresponding amount of gold is driven out of circulation, to be impounded in the treasury or sent abroad; in either event the number of units in circulation and the price level remain the same as before. Suppose the issue of an additional 100. The paper money has no value abroad. The government will not keep it in the treasury. The government would not have issued it except as a means of purchasing services or supplies, and must reissue it when it comes back to the treasury in the payment of taxes, else it would renounce all its advantages in the collection of the tax. There would be left then double the number of units in circulation; prices would double; the unit would buy only half as much as before. Depreciation would follow inflation. The government would gain still by the issue of paper money, but it would have to issue twice as many units as before to get a given purchasing power; the dose would need to be constantly increased to produce a given effect. Furthermore, the government from now on would get its gain only at the expense of its people. Its gain would be offset all along the line by the losses of individuals who would receive for their services and products perhaps a greater number of monetary units but certainly a smaller actual purchasing power.

Not even the neutral countries could escape the effects of the issue of paper money by the belligerents. Even when they remained on a gold basis they had now so many more units, driven out from the belligerent countries, that the gold unit itself depreciated. The dilution of currency spread over the world and resulted in a world-wide inflation.

723. Statistics of currency inflation and of prices. — I have described conditions, in preceding sections, in an artificially simple form, and have neglected many elements that would have to be included if there were space for a more precise and complete treatment. The general tendencies and results were in rough accordance with the description given, as may be seen from the figures of the table below. In both columns the year 1913 is taken as the basis of comparison; the increase of currency of all kinds, and of wholesale prices, may be measured by comparing the figures given for 1919 with par, 100, in 1913.

	Units of currency	*Average of wholesale prices*
United Kingdom..........	244	257
France....................	365	330
United States.............	173	206

The inflation of currency and prices presented in these figures was moderate in comparison with conditions in central and eastern Europe, where the flood of paper money broke all bounds; the quantity of currency in 1919, compared with 1913, was in Germany 875, in Rumania over 1,100, in Austria and in Poland higher still.

724. Effect upon foreign exchange. — Leaving aside the grave effects of these rapid changes in the price level on the earnings and income of different classes, there is a particular reason for studying them in their relation to international trade. We have had occasion to note previous changes in the price level, such as the rise in prices before 1914; but these earlier changes were more moderate, and what is still more important, were about the same in different countries. The changes resulting from the issue of paper money were not only more abrupt; they were different in individual countries, as can be seen from the figure in the last section. The price level in any country depended upon the particular amount of paper money which the government of that country felt obliged to issue. The prices of Europe were no longer gold prices, steadied at a common level by the inflow and outflow of gold; they had no common level, they lost their former steadiness. With these changes the time-honored basis of international transactions, the old par of foreign exchange, disappeared.

725. Par of exchange on the gold standard. — The significance of the change can be most readily appreciated if we consider a simple case, say that of an English spinner who buys raw cotton in the United States. The American wants dollars; the Englishman has pounds sterling to offer. It does not matter in which unit the bargain is expressed, whether the American gets the right to draw an order on the Englishman for so many pounds sterling and sells this to a bank for dollars, or whether the price is fixed at so many dollars, and the Englishman makes payment by buying a bill for that amount with his pounds sterling. In either event one party to the bargain must deal in the monetary unit of the other. Under the old system both units were perfectly definite weights of gold. A merchant knew, within narrow limits, how much he had to pay or to receive. The gold in £1,000 was equal to the gold in $4,866. Sterling exchange was at par in New York when the pound was quoted at 4.866. Exchange could not vary far from par, for the cost of shipping the gold itself was only about two cents per pound sterling, and the gold of either country was perfectly acceptable in the other.

726. Foreign exchange on a paper standard. — Consider now the situation after England has driven gold out of circulation by the over-issue of paper money. The pound sterling has become a "paper pound," of which the value stands in no fixed relation to a definite weight of gold, but is determined by a new set of factors, particularly by the condition of the English treasury and the prospect of an expansion or contraction of the paper currency. The American can no longer count with any assurance on the value to him in dollars of a sum due him in pounds sterling three months hence; the Englishman is no longer in a position to calculate how many pounds sterling he will need to pay a debt contracted in dollars. The rate of exchange, instead of being fixed close to 4.866, may go down to 4.50, 4.00, 3.00 — there is no limit to its depression or to the sharpness of its fluctuations. The student should note particularly two elements which are important in an analysis of the situation. First, international transactions involve a considerable time interval, say three months, within which events may occur that will make sweeping changes in rates. Second, the purchasing power of paper money at home, where prices are fixed by contract or affected by custom, does not change in accordance with the rate at which it is estimated in foreign exchange. As a result there is a "spread" in the factors determining profit or loss in international transactions which makes foreign trade extremely speculative, and makes its flow fitful and irregular.

QUESTIONS AND TOPICS

1. Dangers arising from the German political constitution. [W. H. Dawson, What is wrong with Germany?, London, 1915; Veblen, Imperial Germany, Chap. 5.]

2. "German industry considered as a factor making for war." [H. Hauser, Economic Germany, London, 1915, a pamphlet of 33 pages.]

3. Commercial aims of Germany in the war. [Snow and Kral, German trade and the war, Washington, 1918, pp. 11–14.]

4. How do you explain the fact that the direct expenditures for war by the Entente were more than double those of the Central Powers?

5. What portion of the cost of the war fell upon your individual family? [Tabulate money costs under taxes, contributions, losses. Who bears the cost of government bonds? Estimate "real" costs in the form of extra exertion, diminished consumption, decline in purchasing power of the family income.]

6. The question of neutral rights, 1914–1916. [Ogg, National progress, chap. 18; Paxson, Recent history of U. S., chap. 44.]

7. Assuming that both parties to the European conflict departed from established principles of international law, why did the United States choose the side of the Entente?

8. Have previous wars led to the issue and over-issue of paper money? What was the experience of the United States in the Revolution; in the Civil War?

9. Did your family gain or lose by the inflation of currency and the rise of prices? Does the country as a whole gain or lose by these movements?

BIBLIOGRAPHY

James D. Whelpley, * The trade of the world, N. Y., 1913, is an account, popularly written, of the commerce of the more important European states just before the outbreak of the war. General histories of the war give incidental attention to the course of commerce, but treat fully only the topic of submarine activity.

Of the references on the responsibility of Germany, given under Chapter XL and in the Questions and Topics above, Veblen, Imperial Germany and the industrial revolution, London, 1915, is the most thoughtful; the work by Snow and Kral is a government report, Bureau of Foreign and Domestic Commerce, Misc. Series no. 65, useful for matters of fact.

Preliminary economic studies of the war, published for the Carnegie Endowment for International Peace by the Oxford University Press, and cited hereafter under the heading Carnegie Peace, comprise careful studies in various parts of the field, of which the most important for present purposes are no. 24, Ernest L. Bogart, Direct and indirect costs of the great World War, N. Y., 1919, and no. 9, J. Russell Smith, Influence of the great war upon shipping, N. Y., 1919.

The topics of money, prices, and foreign exchange lead the student into a great mass of literature quite apart from his usual sources. On questions of fact a convenient compilation is presented by the Secretariat of the League of Nations, Currencies after the war, London, 1920, and a wealth of material is comprised in the reports of the Brussels International Financial Conference of 1920. For current facts and discussion see Bulletin of the Federal Reserve Board (Washington, monthly), The Annalist, a weekly publication of the N. Y. Times, and, besides the other financial papers, the bulletins of New York banks (Federal Reserve, National City, Guaranty Trust). The ordinary student will best employ his time by a careful review of the principles of paper money and of foreign exchange, as they are presented in manuals of economics. F. W. Taussig, ** Principles of economics, 2 vol., 3d ed., N. Y., 1921–1922, deserves particular recommendation.

CHAPTER LV

THE UNITED KINGDOM, 1914–1920

727. Statistics of English trade, 1913–1919. — Statistics of the general trade of the United Kingdom in the war period are given in the following table, to which is added a column showing the excess value of the imports of merchandise and a column showing the excess value of the import (I), or export (E), of gold.

(*Figures in millions of pounds sterling.*)

	Total imports	Domestic exports	Foreign exports	Excess imports	Excess gold
1913..........	769	525	110	134	I 13
1914..........	697	431	95	170	I 28
1915..........	852	385	99	368	E 29
1916..........	949	506	98	345	E 21
1917..........	1,064	527	70	467	E 150
1918..........	1,316	501	31	790	I 51
1919..........	1,626	799	165	662	*

* Figures of gold movement for 1917 and 1918 are unofficial; figure for 1919 is lacking.

728. Interpretation of the statistics. — Statistics of commerce in the war period are necessarily inaccurate, and two points particularly should be borne in mind in analyzing these figures. (1) The statistics omitted an immense trade in government-owned goods; figures of the actual movement of merchandise should be much larger to give an accurate idea of the facts. The correction would apply particularly to the earlier years of the war, and would affect imports more than exports.*

(2) Prices were rising rapidly, with the inflation of the currency; in 1919 they were about two-and-one-half-fold the prices of 1913. The correction to be applied, to ascertain the physical volume of trade, would affect both imports and exports.

Clearly the trade of the United Kingdom, if measured not in paper values or in gold values but in quantities of physical goods, declined during the war. The shrinkage was most marked in re-exports, of foreign and colonial merchandise. The English had to renounce most of the business that they had been used to transact as middlemen, distributing through the

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* In July, 1917, and thereafter the accounts included merchandise imported and exported in public as well as private ownership, except exports for the use of British troops in the field. Before July, 1917, the figures of exports included property of the allied governments, but omitted a large part of that of the British government; figures of imports omitted property both of the British and of allied governments, except that they included all articles of food. Some idea of the divergence of the figures from the facts may be got by comparing the American statistics of exports from the United States to the United Kingdom with British statistics for the same calendar year of imports from the United States.

	American figures $ millions	British figures £ millions
1913	591	142
1914	600	139
1915	1,198	238
1916	1,887	292
1917	2,009	376
1918	2,061	515
1919	2,279	542

Normally the British figures of imports, c.i.f., would exceed the American figures of exports, f.o.b., as they did in 1913. The divergence in the opposite direction of the two sets of figures in following years is sufficiently striking even if the pound sterling is rated at $5.

world the goods of other countries. The values of domestic exports also declined at the beginning of the war, and though they returned later to about their former level, the volume of actual wares must have shrunk seriously, to half or less. Only in the case of imports do we find a rise in value that keeps pace with the rise in prices, and indicates a flow of goods that persisted and perhaps increased in amount. These results are what we should anticipate. "Business as usual" is a motto favored by the private merchant, but one which spells ruin for a people engaged in war. To make war effectively they must abandon their usual employments, turn away their regular customers, seek from outsiders only the things that offer a military advantage, but seek all that they can get of those things.

729. Problem of acquiring and of paying for the imports. — The most serious problem for England was to get the goods across a sea infested by submarines, in ships that had constantly to be renewed, through terminals choked by an extraordinary congestion of traffic. This was the vital problem, which strained the energies both of the military and industrial forces of the country, but which by their cooperation was solved. A problem of secondary importance at the time, but important always, was that of paying for the goods.

England had long been used to import goods in excess of those exported. The figures for 1913, £134 million excess value of imports over exports, may be taken as a normal measure of conditions in the recent period of peace. Let the reader, however, glance down the column giving the excess of imports in the years following, amounting 1914–1918 to more than £2,000 million, and he will appreciate the magnitude of the problem involved.

730. Details of the method of payment. — One mode of payment is indicated in the table, in the column of gold shipments. £200 million of gold were exported (in excess of imports) in the three years 1915–1917. The fact that in the year 1914 and particularly in 1918 England was able to add to the government's gold reserve is striking evidence of the country's financial strength. The net excess of gold exported, 1914–1918, amounted only to about £120 million, and went but a little way toward payment for the excess of merchandise imported. Reference to an earlier chapter (section 448) will indicate other resources which the country had at its disposal. British ships which carried freight for foreigners during the war received extraordinarily high rates, but many ships were pressed into government service, many were lost, and considerable sums had to be paid to neutral carriers. Net earnings on shipping could hardly have maintained the level of the period before the war, although in one estimate they are credited with a contribution, 1914–1918, of £600 million. A more considerable resource, ideal as a "liquid" asset and adequate in amount to more than any demand that was made upon it, lay in the vast investments that England had made in other countries. The sum of these investments is estimated to have amounted in 1914 to £4,000 million — twice the total adverse balance of merchandise imports. If they had been kept intact the annual returns from them in the five years 1914–1918 would have amounted to nearly half of the bill to be met. Actually they were "mobilized" by the government early in the war, by an arrangement under which the holders exchanged them for government bonds; they were then used as collateral for loans abroad or were sold outright. Estimates of the amount of foreign investments thus sold vary from £500 to £1,000 million. Finally the government borrowed abroad over £1,000 million; that is, it paid the foreigner for the merchandise which he had shipped by getting another foreigner to advance the money to him.

The figures given above are in most cases rough estimates, but even at the minimum they amount to a total considerably above the £2,000 million which was suggested as the sum required. In fact, England was herself lending large amounts abroad in the very period in which she was herself borrowing. She found it necessary to support some of her dominions and allies by loans which amounted altogether to about £1,800 million.*

731. Character of exports and imports. — In general character the trade of the United Kingdom remained unchanged through the war. Four-fifths of the exports, roughly, continued to be articles wholly or mainly manufactured; coal was the all-important item among the raw materials. On the other side of the account three-quarters of the imports continued to consist of food-stuffs, raw materials and articles mainly unmanufactured. On both sides of the account, however, there were great changes in the relative standing of the items in detail, to accord with the shifts in demand occasioned by the war. The exports of textiles were fairly well maintained; they were largely produced by women, and the factories were not adapted to serve other military needs. The exports of iron and steel and their products to all countries except France declined sharply. The production of iron remained nearly constant, and the production of steel increased by one-half, but the metal was urgently needed for military purposes, the shops that worked it up were turned into military establishments, and their products were in large part withdrawn from general trade. In recent years before the war the United Kingdom had exported every year nearly 5 million tons of iron and steel and manufactures thereof. The quantity fell in 1914 to below 4, in 1915–1916 to about 3, in 1917–1918 to about 2. The metal was still leaving the country in this period, but it was destined to a more grim purpose than money-

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* War loans on the books of the British government stood as follows, 1920, (figures in million pounds sterling):

To dominions and colonies	120
To France	515
To Russia	568
To Italy	457
To Belgium	99
To other allied governments	85
	1,844

making, and was not recorded in the statistics. Among the imports those items showed the most marked increase which served the primary needs of subsistence (rice, wheat flour, bacon and hams, cheese, milk, cocoa, etc.), or were directly available for military use (fuel oil, gasoline, copper, arms and ammunition, chemicals, etc.).

732. Sources of imports. — The war entailed changes even more sweeping in the direction of English trade than in the items composing it. Among the countries of the world Germany had an importance second only to that of the United States as a source of imports into the United Kingdom. If to Germany be added the other Central Powers, and Belgium, of which all but a small fragment was soon occupied, a territory was cut out which in 1913 had furnished over one-sixth of the imports for consumption in the United Kingdom. The following table indicates how these losses were made good, and where the additional supplies were procured which the war demanded.

PERCENTAGE OF VALUE OF IMPORTS FOR CONSUMPTION

	1913	1914	1915	1916	1917	1918	1919
From British Possessions	20	23	28	29	32	32	34
From United States	20	21	30	33	37	40	35
From all other	60	56	42	38	31	28	31

The extent to which England satisfied her needs, within the Empire is the more remarkable because of the distance of some of the most important possessions, which put an additional strain on shipping that already had to do double duty.* Most striking, however, of any feature of the table, is the position of extraordinary importance it gives to the United States, to be explained by the fact that this country was relatively near, was blessed with an abundance of the commodities required, and was inclined to the Entente even before it entered the war. In the years 1917 and 1918 the United States is credited with having "furnished from 50 to 95 per cent of the United Kingdom's total imports of wheat, wheat flour, corn, oats, barley, bacon, hams, glucose, kerosene, motor spirits, lubricating oil, fuel oil, pig iron and crude steel, raw copper, spelter, raw cotton, tobacco, etc."

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* In 1915 Egypt was changed in the British classification from the position of foreign country to that of British Possession. Imports from Egypt were in 1913 £16,000,000 and increased rapidly toward the end of the war, to £5,000,000 in 1918.

733. Markets for exports. — In times of peace a country is in general more interested in markets for its exports than in sources from which to supply its imports. The condition is reversed in time of war, for reasons that have already been suggested. The Central Powers and Belgium took 13 per cent of the exports of the United Kingdom in 1913, but the closing of this market was of relatively slight consequence at the time. The volume of British products available for export diminished so much that there were few markets to which the flow of goods was maintained. Exports even to the United States barely held their own, in spite of the phenomenal increase of imports from this country.

One country, France, was an outstanding exception to the general rule. The United Kingdom had been used to import from that country more in value than it exported thither. The war effected an abrupt reversal of the situation; imports from France declined, exports thither increased enormously.

Special Trade of United Kingdom with France, 1913–1919.

	1913	1914	1915	1916	1917	1918	1919
Imports into U.K., £ million	41	33	27	22	20	32	44
Exports from U.K. £ million	29	26	70	93	112	131	147
Per cent total exports from U.K.	5	6	18	18	21	26	18

The interpretation of these changes is simple. France was the battlefield on the western front. British exports thither were either supplies for the front, or were destined to relieve French labor and products for military service.* Toward the end of the war France was taking about two-thirds of the total British export of iron and steel manufactures.

By a concentration of resources and energies such as pictured here the war was won. Meanwhile, however, England was neglecting her old customers in various parts of the world, both in the British Possessions and foreign countries. The countries of South America were forced to turn to the United States for manufactures which had formerly reached them from Germany or England; the countries of the Far East were forced to turn to Japan. One of the most serious of the problems of the period following the war was to England the recovery of the markets which she had had to sacrifice in the stress of the conflict.

734. Effects of the war on agriculture. — To follow out the influence of the World War on the internal organization of the countries engaged is beyond the scope of this book. A revolution in commerce such as that described in the last few pages reflected, of course, a corresponding change in internal conditions. The war dissolved old traditions and loosed new forces; the countries engaged in it will never be again what they were before 1914. There is space here only to sketch briefly a few of the changes.

The imperative demand for food, when incoming cargoes were constantly being sunk before they reached port, put on British agriculture a strain which was felt more keenly because of the large proportion of agricultural laborers drawn into military service. One result which promised to have a lasting effect was the introduction of improved mechanical equipment, particularly the modern tractor. The heavy taxes on the owners of large estates forced into the market great areas of land which had been held as a social rather than an economic investment; and laws were passed designed to put agriculture on a more businesslike basis, and particularly to further the growth of small holdings. So deeply rooted, however, are the traditions of English rural life that it would be hazardous to predict the issue of these changes.

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* These figures of exports omitted, before July, 1917, most British government property, and even after that date government supplies for British troops in the field. The inclusion of these items would make even more impressive the concentration in France of the flow of goods from England.

735. Effects on industrial organization. — In the more important field of manufacturing industry the changes were likewise sweeping and the permanence of their effect appears to be more certain. Government control was general and despotic. It was heavy-handed, and was often ineffective. It was attended by much friction and waste. It did at least accumulate and disseminate the best technical information and it was ruthless in scrapping antiquated equipment. It stimulated original and constructive thought, if only by reaction against its own arbitrary rules. When manufacturers escaped from it at the close of the war they had already learned much about their business that was new and valuable to them, and were in the way of learning more by their own initiative.

The English, like other peoples, had depended very largely on Germany for synthetic dyes; that is, those dyes which are manufactured in the laboratory by chemical processes, and which have driven most of the natural coloring matters from the field of industry. After the outbreak of the war they suffered for this dependence on two accounts; first in their textile industry by the lack of dyes of good quality and of the requisite variety, second in the field of military operations by the superiority of the Germans in the manufacture of explosives, to which the plant of dye factories is well adapted. Early in the war, therefore, in 1915, "British Dyes, Limited" was formed with the encouragement and financial support of the government. This was a combination of manufacturers using dyes, designed to organize the production of synthetic dye-stuffs by the most advanced methods and with a liberal provision for scientific research. This company did not drive from the field individual producers, who actually made great progress during the war. It is significant, however, of a tendency toward combination, which had been less marked in England than in Germany or in the United States, and which had hampered the English in competition with their rivals. Government control during the war greatly facilitated the movement, which appeared in other industries and promised to break down the separatism of the old-fashioned English manufacturers.

736. Effects on mercantile and financial organization. — In the broader fields of marketing and finance the English took stock of their deficiencies and set to work to remedy them. There was a noteworthy movement toward amalgamation in the banking business, reducing the number of competing units and making more effective the resulting institutions. Particularly significant was the organization under royal charter of the British Trade Corporation, with an authorized capital of £10 million. This company was actually a bank, much like the great German banks of the period before the war, but it was not officially so styled, because it was meant to offer services which had not been characteristic of conservative English banking.

"It will not endeavour to compete with the business of existing British banks and merchants, and it will not accept deposits at call or short notice, except from parties who are proposing to make use of its overseas facilities. Its aim will be to assist with the co-operation of banks and other institutions the inception of new undertakings, and for this purpose it will promote the formation of syndicates and the placing of issues. When British capital is raised by its means for overseas enterprises, it will seek to secure that orders in connection with new undertakings are placed in this country. It will pay special attention to the study of new schemes, and for this purpose it will develop an Information Bureau with representatives abroad which will keep in touch with the Department of Commercial Intelligence of the Board of Trade. It will also be ready to give financial assistance to arrangements for promoting the better organisation of British industries."

737. Effects on labor. — In the world of labor, as in the sphere of leaders, the war wrought far-reaching changes. The sudden demand for men in the field necessitated the withdrawal of laborers from industry at the very time when the demand for service at home to support the military establishment was most urgent. There followed a strain on the forces of labor which in some cases was allowed to over-tax the capacity of the worker, not only to his own personal injury but also to the disadvantage of the public; while in some cases the laborer, not properly educated in patriotism and thrift, exploited the situation to extort high wages which he spent extravagantly. In the course of time these extremes were evened out, but they illustrate the stresses which permeated the whole industrial structure and which persisted in one form or another until the end of the war. There was necessarily a great "dilution" of skilled labor, with the labor of women and of unskilled men and youths. Trade unions for a time renounced the strict application of their rules, while at the same time they extended greatly their membership. Conflict with employers was postponed, in general, during the course of the war. But the feeling grew strong in the ranks of labor that an undue share of the burden was thrown upon the worker, and that the capitalist-employer had an undue share of the returns and too nearly absolute control. The Russian revolution appears to have had only a very slight influence on the spread of these doctrines, which can fairly be considered the natural product of war conditions in an industrial democracy. With the close of the war a number of labor conflicts came to a head, and one in coal-mining which was long continued, had a particularly serious effect upon industry in general.

738. Control of commerce and commercial policy. — Early in the war the trade of the United Kingdom was placed by the government under strict control. In the emergency of the war it was obviously proper to assure the priority of national over private interests, and the shortage of ships made regulation doubly important. The importation of some wares was prohibited outright, of some wares was restricted to a definite quantity, of some wares was allowed under government license. Similarly exports were placed under control, to keep the needed stocks at home, and to make sure that enemy powers did not profit by British trade. All these measures had a military object, and had no significance with regard to the traditional policy of free trade. In the second war budget, however, taking effect in 1915, the list of dutiable imports was extended to include some manufactured wares (cinema films, clocks and watches, motor cars, and musical instruments), which were subjected in general to an import duty of 33⅓ %. The measure was designed to give revenue, not protection, and it had little practical importance; the importation of most of these articles was soon absolutely prohibited. As a departure from the principles that had been followed in the preceding half century it had considerable significance. Significance attached also to the arrangement in a later budget by which preferential rates, usually two-thirds or five-sixths of the full rate, were established on most of the articles subject to duty, and an opportunity was thus afforded to make some return to the British dominions for the preferences which they had long allowed.

739. Report of the Committee on Commercial Policy. — An Economic Conference of the Allies was held at Paris in 1916, at which was discussed the commercial policy to be pursued by the allied powers at the close of the war. The conference was probably designed to frighten the Germans into making peace, and had no practical results of importance. It did, however, bring to the attention of the English the questions of policy which they must face, and occasioned the appointment of a Committee on Commercial and Industrial Policy after the War, including a number of prominent and influential members, which made its final report in 1918. The substance of the report was as follows.

The committee condemned the plan of establishing a comprehensive tariff to be used in bargaining with other countries, to force concessions in rates from them; and also the plan to impose duties on manufactured imports as a source of revenue. On the other hand it favored duties in specific instances to prevent "dumping," the sale of goods in a foreign market at prices lower than in the country of manufacture; and it urged, in the light of experience of the war that protection should be afforded, "at all hazards and at any expense," to industries which it described as "key" or "pivotal." Such were the industries providing synthetic dyes, zinc, tungsten (for high-speed steel), magnetos, optical and chemical glass, hosiery needles, precision gages, and certain drugs and chemicals. The United Kingdom had depended on other countries, particularly Germany, for the supply of these products, and had then paid dearly for the lack of them. Finally, the Committee approved the principle of imperial preference, and advised that preferential treatment be accorded to the British Possessions in the case of all customs duties established.

740. Safeguarding of Industries Act, 1921. — By an act of Parliament which went into effect in 1921 the most important recommendations of the committee were given the force of law. The act imposed an import duty of 33⅓ % *ad valorem* on a long list of articles, perhaps 3,000 altogether, defined in detail by the government Board of Trade. The general character of these articles has been already indicated in the preceding section; they were the products of "key industries," without which other and larger branches of industry would be lamed in operation. Another section of the act was designed to prevent "dumping." It empowered the Board of Trade to protect industries in the United Kingdom by a duty of 33⅓ % from the competition of articles offered for sale there at prices below the cost of production in the country of origin, or at prices abnormally low by reason of the depreciation of the currency in that country.

QUESTIONS AND TOPICS

1. Chart the statistics of British trade, 1913–1919, continuing if practicable the graph previously constructed.

2. Immediate effects of the war on the course of British trade. [British oversea commerce in war time, Quarterly Rev., Jan. 1915, 223: 252–265; Trade in war time, Polit. Quarterly, 1916, no. 7, 99–121.]

3. The balance of trade in 1916. [H. J. Jennings in Fortnightly Rev., 1917, 107: 302–312.]

4. In what way did each of the imports in the list of those supplied by the United States contribute to maintain military efficiency?

5. Effects of the war on agriculture. [J. B. Firth in Fortnightly Rev., 1917, 107: 595–605; A. W. Ashby, in Edinburgh Review, 1917, 225: 343–363; H. Wyatt, Development of the agricultural motor, Quarterly Rev., 1917, 227: 194 ff.]

6. Agricultural policy. [L. Smith Gordon in Quarterly Rev., 1917, 227: 178 ff.; F. D. Acland in Contemp. Rev., May, 1917, 111: 570–578; E. Lipson in Fortn. Rev., 1917, 107: 100 ff.]

7. Industrial efficiency in the war. [A. Shadwell in Edinb. Rev., Jan. 1915, 221 : 151–177; B. S. Rowntree, Nineteenth Cent., 1917, 81: 399–412.]

8. The British Trade Corporation. [H. J. Jennings in Fortn. Rev., 1916, 106: 841–851; R. H. I. Palgrave in Quart. Rev., Jan., 1918, 229: 143–153; C. S. Addis in Edinb. Rev., July, 1918, 228: 43–58.]

9. The labor movement during the war. [G. D. H. Cole in Amer. Econ. Rev., Sept., 1918, 8: 485–505; J. A. Hobson in Contemp. Rev., Nov., 1920, 118: 638–645; R. S. Rowntree in Contemp. Rev., Oct., 1917, 112: 368–379.]

10. Railroads in and after the war. [E. A. Pratt in Nineteenth Cent., 1916, 80: 398–410; J. H. Balfour-Browne in Nineteenth Cent., 1918, 83: 619–636; Edinb. Rev., Jan., 1917, 225: 84–103; W. M. Acworth in National Rev., 1919–20, 74: 256 ff.]

11. Shipping at the close of the war. [J. Hilton in Edinb. Rev., Apr. 1918, 227: 359–382; S. Brooks in Nineteenth Century, 1918, 84: 1116–1129; C. Maughan in Quart. Rev., Oct., 1919, 232: 471–488; A. Hurd in Fortn. Rev., 1920, 113: 584–597.]

12. Proposals of the Paris Conference of 1916, regarding trade policy after the war. [H. Cox in Edinb. Rev., July, 1916, 224: 189–208; J. A. R. Marriott in Nineteenth Century, 1916, 80: 1097–1112.]

13. Report of the Committee on Commercial Policy. [Beauchamp in Contemp. Rev., May, 1917, 111: 545–552; L. J. Reid in same, July, 1918, 114: 35–40.]

14. Tariff policy at the close of the war. [H. Cox in Edinb. Rev., Apr. 1917, 225: 379–408, and Oct., 1918, 228: 387 ff., with many references to contemporary opinion.]

BIBLIOGRAPHY

Most of the statistical facts of primary commercial importance are to be found in the annual volumes of the Statistical Abstract of the United Kingdom. A useful compilation is offered by William A. Paton, *The economic position of the United Kingdom, 1912–1918, Washington, 1919, Bur. of For. and Dom. Commerce, Misc. Series no. 96.

Of the publications of the Carnegie Peace Endowment the following pay special attention to the United Kingdom: vol. 11, B. H. Hibbard, Effects upon agriculture; vol. 18, C. W. Baker, Government control and operation of industry; vol. 7, F. L. McVey, Financial history; vol. 4, F. H. Dixon and J. H. Parmelee, War administration of the railways; vol. 14, M. B. Hammond, British labor conditions and legislation. J. A. Salter, Allied Shipping Control, Oxford, 1821, is the first of a British series of publications of the Carnegie Peace Endowment which promises to make important contributions to our knowledge of the war period. Howard L. Gray, War time control of industry: the experience of England, N. Y., 1918, is accepted by competent British critics as an excellent presentation of the subject.

The British Association for the Advancement of Science stimulated inquiries into "Labour, finance and the war," which have been edited by A. W. Kirkaldy and published under that title.

The National Civic Federation published a report on The labor situation in Great Britain and France, N. Y., 1919, which aimed to describe impartially conditions and policies. In the writings of G. D. H. Cole (Labour in war time, London, 1915, etc., etc.) will be found a vigorous criticism of the existing system; for a corrective see L. L. Price, Mr. Cole on labour problems, Economic Journal, June, 1919, 29: 186–201. Space is lacking here for reference to the many publications on Whitley Councils, Gild Socialism, etc., and to the various aspects of "reconstruction." A brief report entitled Economic reconstruction, from the Bureau of For. and Dom. Commerce, Misc. Series no. 73, Washington, 1918, attends particularly to commerce and commercial policy, and is relatively full on the United Kingdom; it can if necessary be made to serve as a substitute for the full report of Lord Balfour of Burleigh's committee on commercial and industrial policy [Cd. 9035], which was published in the parliamentary set for 1918, vol. 13, with an extensive report on shipping and other reports on special industries.

CHAPTER LVI

FRANCE AND THE PROBLEM OF REPARATIONS

741. Effects of the war upon the commerce of belligerent and of neutral states. — The commerce of the United Kingdom in the period of the war has been treated at considerable length not only because it was itself an important factor in determining the outcome of the struggle, but also because it illustrated the general conditions of the period. War brought to the other belligerent states the same urgent need of imports, affected in a similar way the organization of production, and restricted exports. To the neutral states the war brought some dangers and some losses, but it brought also a great commercial opportunity. If they were in a position to supply the needs of the belligerents they could charge unheard of sums for their services. Individual merchants who seized the opportunity made great fortunes, in the Netherlands, in the Scandinavian states and in Spain. 8 - In neutral as well as in belligerent states, however, the waste of war brought loss and suffering; while some few individuals grew richer the mass of the people grew poorer.

742. Statistics of French commerce, 1913–1919. — The most important features in the commerce of France in the period of the war appear in the accompanying table. As the table does not take into account the depreciation of the French currency in the course of the war and gives merely nominal exchange equivalents, the reader should be cautious in the comparison of figures in the upper and lower part of a column, and in the comparison of these "paper" figures with figures representing actual gold dollars, as given in the statistics of the United

States.* Figures in any horizontal row are strictly comparable, since they represent an equal amount of depreciation.

TRADE OF FRANCE, 1913–1919.

(Figures in hundred millions of dollars; 1 signifies approximately $100,000,000. The left-hand column under every heading gives imports; the right hand column gives exports.)

	Food products		Material for industry		Manufactures		Total trade	
	I.	E.	I.	E.	I.	E.	I.	E.
1913......	4	2	10	4	3	7	16	13
1914......	4	1	7	3	2	5	12	9
1915......	6	1	9	1	6	5	21	8
1916......	8	1	13	2	9	7	29	10
1917......	13	1	23	2	17	8	53	12
1918......	10	1	18	2	12	5	40	8
1919......	12	1	18	3	11	7	41	12

743. Changes in imports and exports. — Attending first to the horizontal row giving conditions in 1913 we find France able to enjoy a surplus of imports by reason of her foreign investments, in Russia and other countries; the imports consisted mainly of industrial raw materials, to a less extent of food products, still less of manufactures. The country made payment for its imports mainly by finished manufactures, but exported also raw materials and food products. Now following down the vertical columns the reader will note an absolute decline of the value of exports, even in terms of a depreciated currency; this implied, of course, a much more serious shrinkage in the quantities of wares sold abroad. Accompanying this movement was a rapid expansion in the nominal value of the imports, sufficient in some branches to indicate an actual increase in the volume of trade, and resulting in a divergence in the values of imports and exports which signified that France was incurring a heavy debt abroad.

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* The franc, nominally worth $.193, declined rapidly in purchasing power in the course of the war, but was kept close to par in foreign exchange by the action of the allied governments in "pegging" the exchange. When the government ceased to control the rate, in the Spring of 1919, it fell sharply; it was below $.10 in Dec., 1919, was below $.06 in Dec. 1920, and then made a recovery.

744. Changes in the direction of trade. — From Germany France had received in 1913 about 13 per cent of the total value of her imports, from Belgium about half as much; so that the closing of those two countries alone involved the source of one-fifth of the French import trade. Russia had not been so important as a source of supply, and trade with the Central Powers aside from Germany had not been considerable. The following table indicates the sources to which France turned to obtain the means for carrying on the war.

IMPORTS INTO FRANCE, BY COUNTRY FROM WHICH OBTAINED

(Figures in hundred millions of dollars; .1 signifies approximately $10,000,000.)

	1913	1914	1915	1916	1917	1918	1919
United States	2	2	6	9	19	13	11
United Kingdom	2	2	6	8	13	11	10
Spain	.5	.4	1	1	3	1	1
Italy	.5	.3	1	1	2	1	1
Argentine	.7	.4	1	1	2	2	2
Algiers	.6	.6	1	1	1	1	1

The exports of France, measured even in the inflated value of the period, declined in the case of most countries of commercial importance; the noteworthy exception was Italy, to which, in the course of the war, exports were double or triple the usual value of the preceding period of peace.

745. French finances during the war. — French finances were in bad condition at the outbreak of the war. Expenditures had increased greatly in the decade before 1914, and the government was slow to recognize the necessity of heavier taxes. In the years 1908–1914 every year but one had shown an actual deficit. After mobilization, which even in August, 1914, had called out nearly 4 million men and early in 1915 had called over 5 million, it was particularly difficult to devise and apply new taxes; while in the meantime the enemy had occupied some of the richest industrial districts, contributing normally about 15 per cent of the public revenue. In consequence the government raised by taxation only a small proportion of the funds required by the expenditures of the war period (Aug. 1, 1914 — Apr. 1, 1919), about one-eighth, as compared with one-quarter in the United Kingdom and one-third in the United States. Stating figures approximately in milliards of francs the government incurred a total expenditure of 181, and met it as follows: 22 by taxes, 86 by loans placed at home, 26 by loans from the Bank of France, 27 by foreign loans, leaving a floating debt of 20 still to be provided for in 1919. The last three items had an important bearing on the commercial relations of France. Loans from the Bank of France took the form of bank notes, paper money, which inflated the currency and tended to raise the rate of foreign exchange on other countries far above the normal par; the unsettled finances evidenced by the floating debt tended to cause violent fluctuations of the rate; a foreign debt would, if interest were paid on it, involve remittance at high rates and would require an increase of exports if no other resource were available.

746. Damage done to the devastated districts. — The amount of the damage done to property in that part of France where the fighting took place will probably never be known with any approach to accuracy. The area affected was not very large, perhaps 10 per cent at most of the total area of France, of which the smaller part, perhaps 4 per cent of the total, lay in the devastated districts where the fighting was fiercest. Unfortunately for France her best coal and iron mines and almost one-third of her manufacturing industry lay within the area of invasion; from one-half to nine-tenths or more of some of the textile manufactures (woolen, cotton, flax and linen) and half of the metal workers, were in the occupied zone. France was seriously handicapped during the war by her inability to draw upon the resources of the occupied regions. Her dependence on imports from the United States and the United Kingdom would not have been nearly so great if she had been able to maintain her productive organization unimpaired. She suffered from the lack of product, but in spite of that she and her allies won the war. Then she faced a greater loss, that of plant, the accumulated capital of generations, represented not only in mines and factories, but also in dwelling houses, in roads and bridges, in the very fields themselves. In the devastated districts peace restored to her not an asset but a grievous liability. She owed to her own people the obligation of repairing the damage and restoring that which had been destroyed, at a time when she was crippled by other burdens which the war had cast upon her. Conservative estimates of the loss ranged from 10 to 15 milliards of gold francs; other estimates (unquestionably exaggerated for political purposes) went up to 65 or 75 or more.

747. Territorial gains of France. — The treaty of peace rendered France some benefits that may be put on the other side of the account. Most important to her, among the territorial changes, was the restoration of the provinces of Alsace and Lorraine, which Germany had taken and had held since 1871. Lorraine included the richest bed of iron ore in Europe; from that province Germany had derived, since the development of the basic process of steel manufacture, three-fourths of her annual supply of ore. The phosphate slag, which was a by-product of the basic process, was a valuable fertilizer; and a great bed of potash in Alsace offered another important agricultural resource. To atone to some extent for the wanton damage done to the French coal mines, which could not be repaired for years, Germany ceded ownership in the coal mines of the Saar basin, on the border of Lorraine, which did not, however, become a part of France, but was left under international control. These changes doubled French capacity for iron production. They left her still short of coal, particularly of the coking variety needed for blast furnaces; and promised to render her the greatest return if she shipped her ore to the Ruhr district of Germany to be smelted.

748. The question of reparation; Germany's quick assets. — Important as were these territorial changes for the future of France they offered little help in her present emergency. She needed immediately a great fund of fluid wealth, which could be used to repair the damage done to her by the war, and felt that she had the right to look to Germany, the deliberate aggressor in the conflict, to make good the losses which she had suffered.

Reference to the table of costs of the war in a preceding chapter will show the lamentable inadequacy of German resources to make good the total losses for which Germany was responsible. The costs could have been met only in small part even if the total national wealth of Germany as it was before the war could have been expropriated. Some parts of that wealth, indeed, could be and were taken; such were securities representing German investments in foreign countries, and ships, which could be moved to any part of the world without losing their value. In the aggregate these items went but a little way toward meeting the total costs. Another item, the stock of precious metals which the German government had accumulated and retained, was not so readily available as it appeared to be; on that stock was based the whole structure of public and private credit in Germany, and a drain upon it, if excessive, would cause a collapse that would seriously affect the solvency of the country. Germany was in such desperate straits at the close of the war that the allies of the Entente were forced to allow her to buy food from the outside with part of the gold reserve, and saw it melting away before their eyes. In sum, the "quick assets" of Germany were pitifully small to meet the bill of costs; they were estimated to amount to several milliard dollars, but when the necessary deductions were made they offered scarcely one milliard for reparations.

749. Principle conditioning Germany's capacity to pay. — Most of the wealth of Germany was fixed in the country, and was not directly available for reparation. There was no sense in confiscating and distributing it. The reader will better understand that essential point if he will face the question: how could the benefits arising from the ownership of that wealth be transferred to other countries to be enjoyed in them? Suppose that you are granted, to repair your losses in the war, the ownership of a German farm or factory; how will you get any good from it? You want some real material good, something that you could enjoy yourself, or could exchange to advantage. A piece of paper would not satisfy you. Gold would be acceptable, but the Germans had little of that left, needed a minimum amount to enable them to continue in business, and could get more only as they bought it abroad. To pay you something real the Germans would have to ship out something real, whether they paid it directly to you or bought with it "foreign exchange," that is, the right to something real, gold or its material equivalent, in the country in which you live. After the initial payment of the country's quick assets, *Germany could pay only a sum equal in value to the excess of German exports over imports during any period of time that might be determined.* This was the fundamental principle limiting the amount of payment in reparations that could effectively be imposed.

750. Practical limits of amount and period of payments. — There were, therefore, two factors to be considered in fixing the amount to be exacted: the amount per year that Germany could pay, and the number of years over which payments should extend. Trustworthy investigators reached the conclusion that Germany *before the war*, with its productive organization unimpaired, would have been able to pay about one milliard dollars a year. Here was given the maximum for one factor. Various considerations set a limit to the other factor, the period of time during which payments should be exacted. On this as on other points there was no general agreement; the situation at the close of the war was too tense to permit participants in it to judge the question calmly. Fair-minded friends of the western allies believed, however, that the interests of the allies themselves required the limitation of the period during which the payment should be made to a definite and reasonably short time, say thirty years, the span of a human generation. This restriction was prompted by regard to justice, by the impropriety of visiting on future generations the sins of their ancestors. It accorded with considerations of political expediency; the payment of reparations was certain to introduce an element of strain in international relations, both economic and political, which must not be too long continued. Finally, and practically of the greatest importance, the benefit to be derived from reparations grew rapidly less as the time of payment was extended. The reader doubtless knows how quickly sums mount up when they are put at compound interest. He should realize that payments to be made in the future shrink correspondingly when their present value is computed by a process of discount. How much will you give for my pledge to pay one dollar fifty years hence? You are foolish if you offer more than a small fraction over five cents, when the rate of interest is 6 %.

With due regard to all the factors in the settlement sober and competent students of the question believed that the maximum payment which should be imposed on Germany might amount to a lump sum in present value of ten to fifteen milliards of dollars.

751. Provisions of the Treaty of Versailles regarding reparations. — By the Treaty of Versailles (article 231) Germany accepted "the responsibility of Germany and her allies for causing all the loss and damage to which the Allied and Associated Governments and their nationals have been subjected as a consequence of the war imposed upon them by the aggression of Germany and her Allies." The treaty itself recognized that the resources of Germany were not sufficient for complete reparation, but, most unfortunately, did not itself fix a definite sum, the maximum which Germany might reasonably be expected to pay with reference to the practical factors which have been sketched in the preceding section. Some of the European leaders in the Entente had held out extravagant prospects of indemnity to their people, and were unwilling as yet to confess the facts. The exact terms of payment were therefore left to be settled later by a Reparations Commission which was given far-reaching powers to get the most it could up to a limit set so high that it manifestly exceeded German capacity to pay. Then followed a period of bitter contest in which the Allies by threats, by fiscal penalties, and by actual occupation of German territory sought to make good their claims, while the Germans fell behind in payment and stolidly professed their inability to meet the demands imposed upon them. Recovery and reconstruction were seriously delayed, both in western and in central Europe.

752. London settlement of May, 1921. — A substantial approach toward a practicable settlement of the question of reparations was made in conditions drawn up in London in May, 1921, and imposed on Germany under threat of an occupation of the district of the Ruhr. The terms are complicated, and are not worth a detailed description for they will probably be amended, but they are of interest as indicating the form that the final settlement may possibly take. A summary of the most important provisions follows: figures are stated in milliards of gold marks, a unit roughly equal to 250 million dollars.

Germany was bound to annual payments under two heads: first a fixed sum of 2 milliards, second, a sum equal in amount to about one quarter (26 %) of the value of German exports for the year, but not less than 1 milliard. On the basis of these annual payments of a minimum of 3 milliard the allies were to issue German bonds of a face value of 50 milliard, on which 5 % interest could be paid and still leave available half a milliard a year to be employed in a sinking fund toward the extinction of the debt; after a period of about thirty-seven years Germany would be free. The allies hoped to realize the present value of the bonds by selling them to investors, and thus get ready funds for economic reconstruction; while they professed to believe that the minimum of 3 milliard marks a year was well within the German capacity to pay. Germany before the war had, indeed, an export trade amounting to 8 milliard marks and over, while this arrangement assumed only about 4 milliard, but assumed that the exports could carry the burden of a heavy tax. The provision for the variable payment of 26% of the exports assured the allies that they would share in Germany's prosperity if it actually did return; and arrangements were made for the possible issue of more bonds on this basis up to the amount of 82 milliard, making the total capital sum 132 milliard — over thirty thousand million dollars. The bonds were to be distributed among the allied states in the following proportions: France 52 per cent of the issue, United Kingdom 22, Italy and Belgium 10 each, and the remaining six to the smaller states.

753. Objectionable aspect of reparation payments. — Attention should now be directed to an interesting and important feature of the reparation question. Germany, as has been said, could pay an indemnity only by a surplus of exports over a long period of years. Likewise, the allies in the long run could receive an indemnity only in the form of a surplus of imports. Might not this flow of goods, forced by pressure on Germany, be a curse rather than a blessing to the country receiving it; might it not undermine home industries? Or, if a tariff protected the producer at home might it not simply divert this flow to neutral markets, where the British or French exporter would find himself crowded out by a competition that was fierce and unyielding because of the military pressure behind it — the military pressure of his own home government! If Germany endured the strain would she not at the end of a generation rule the markets of the world, win the world by losing the war? The situation sounds so paradoxical that it is hard to realize how serious is its import. Only by a surplus of exports could Germany pay. What form could these exports take which would not injure some interests in the allied countries?

It is probable that considerations of this kind will lead in time to a considerable moderation of the demands imposed upon Germany. And it is significant that even in 1921 arrangements were being made for the payment in kind, by the delivery of coal, timber, building material of all kinds, of a considerable fraction of the sum due to France.

QUESTIONS AND TOPICS

1. Report upon one of the neutral states during the war:

(*a*) Switzerland. [Report of Bureau of For. and Dom. Commerce, Misc. series no. 90.]

(*b*) Netherland. [Same series, no. 91; B. Abraham, in Fortnightly Rev., 1917, 107: 443 ff., 1918, 110: 110 ff.; P. Geyl in Contemp. Rev., 1918, 113: 228–294.]

(*c*) Scandinavia. [E. Björkman in American World's Work, Feb., 1918, 35: 437–447.]

(*d*) Spain. [L. A. Bolin in Edinb. Rev., July, 1917, 226: 134–152; E. J. Dillon in Nineteenth Cent., 1918, 83: 386–402.]

2. Recovery of Belgium. [E. Cammaerts in Contemp. Rev., March, 1920, 117: 349–365; J. M. Price in Fortnightly Rev., 1920, 113: 467–477.]

3. The financial effort of France during the war. [J. F. Bloch in Annals of Amer. Academy Soc. and Pol. Sci., Jan., 1918, 75: 201–206.]

4. Territorial gains of France in Europe. [Bowman, The new world, 86–91; Haskins, in What really happened, etc., 45–66.]

5. Alsace-Lorraine. [Haskins, Some problems, chap. 3.]

6. The Saar Basin [Haskins, Some problems, chap. 4; Tardieu, chap. 8.]

7. Territorial interests of France outside Europe. [Bowman, 91–118.]

8. Reconstruction in France. [R. L. Buell in Amer. Polit. Sci. Rev., Feb., 1921, 15: 27–51; H. A. Gibbons in Fortnightly Rev., July, 1919, 112: 64–76; Tardieu, chap. 12.]

9. The question of reparations: the French position. [Tardieu, chap 9.]

10. The question of reparations: criticism of the settlement [Keynes, chap. 5.]

11. The question of reparations: the American position. [Lamont, chap. 11, and Young, chap. 12, in What really happened, etc.; Baruch, 13–75.]

12. Working of the reparation settlement. [Tardieu, chap. 10.]

13. Contributions of the peace treaties to the control of commercial practices and policy. [Young, in History of the Peace Conference, ed. by H. W. V. Temperley, vol. 5, London, 1921, chap. 1, part 3.]

BIBLIOGRAPHY

B. M. Anderson, Jr., Effects of the war on money, credit and banking, N. Y., 1919, Carnegie Peace, vol. 15, covers both France and the United States, and describes the course of commercial affairs in connection with the question of foreign exchange. An excellent survey of the course of French finance is provided by Gaston Jèze., * The economic and financial position of France in 1920, in Quarterly Journal of Economics, Feb., 1921, 35: 175–214; see also Gide in Econ. Journal, June, 1919, 29: 129–137, and both the writers named in Annals Amer. Acad. Soc. and Pol. Sci., May, 1921, 95: 151–160.

On the peace settlement, ** What really happened at Paris, by American delegates, ed., E. M. House and C. Seymour, N. Y., 1921, is well-informed and represents the American position with regard to points at issue better than any other book. C. H. Haskins and R. H. Lord, ** Some problems of the Peace Conference, Cambridge, Harvard Univ. Press, 1920, is restricted to territorial questions. I. Bowman, ** The new world, Yonkers, 1921, treats particularly the problems in political geography arising from the settlement, but pays due attention to historical and economic factors, and includes many valuable maps; the book is indispensable.

On the subject of reparations the best brief account is that by Lamont and Young. Bernard M. Baruch,* The making of the reparation and economic sections of the treaty, N. Y., 1920, is more extensive; it reprints all clauses of the Versailles treaty which are of economic interest. Further material will be found in the elaborate History of the Peace Conference, ed. H. W. V. Temperley, of which five volumes had been published in 1921.

André Tardieu, The truth about the treaty, Indianapolis, 1921, is an eloquent plea for French claims in their entirety; J. M. Keynes, The economic consequences of the peace, N. Y., 1920, condemns the reparations settlement as too severe. Either book may mislead an uncritical reader.

Convenient sources of information on the changing conditions of the time will be found in Current History, a review published monthly by the N. Y. Times, and in Economic Review of the Foreign Press, published weekly in London.

CHAPTER LVII

CENTRAL AND EASTERN EUROPE, 1914–1920

754. Territorial losses of Germany. — By the terms of peace Germany ceded territory in the west to France and Belgium, in the north to Denmark, in the east to Poland. The most serious losses were comprised in the provinces of Alsace and Lorraine, and in part of the province of Silesia. Upper Silesia contained mineral deposits, particularly coal, which the Germans asserted to be indispensable to the industrial development of their country, and the contest over the rights involved delayed a decision for more than two years after the signing of the Treaty of Versailles. The final award, rendered by a commission of the League of Nations, divided between Germany and Poland the territory in dispute but arranged that for a period of fifteen years the whole area be kept under the control of a commission which should recognize the mixture of interests and should maintain free economic intercourse.

The total losses of Germany, measured in area, population, agricultural and industrial resources, ranged from 10 to 15 per cent. Losses in particular resources of great industrial importance were still more serious. The country was obliged to abandon mines supplying about one-quarter of the annual output of coal, three-quarters of the iron output, even a higher proportion of the output of zinc.

755. Internal losses of the country. — These losses fixed by the terms of peace were added to the loss which Germany had already suffered in the course of the war. The population in 1914 was 68,000,000. Deaths in the army amounted to 1,800,000, and the number of wounded was over 4,000,000.

In the civilian population, also, the mortality in the latter part of the war had been very high and the vitality of survivors was impaired. An indication of the extent and character of the losses is provided by some statistics of Prussia, which show a decline in population, 1914–1919, in every province but three, and show a serious decline in the proportion of males. In 1914 there were 102 women to 100 men; in 1919 the proportion was 109 to 100.

Germany emerged from the war not only short in man power, but also weakened by the depreciation of capital and in serious need of some of the most important raw materials. The demands of the army had taken precedence over any other consideration, and had in the four years of war stripped the country almost bare.

756. Effects of the blockade. — The weakening of German resistance and the final surrender were due in large measure to the inexorable blockade maintained by the allies of the Entente. Germany made an extraordinarily effective use of what resources she had. Her scientists produced nitrates from atmospheric nitrogen and so freed her from dependence on imports from South America for her explosives. Her manufacturers made clothing for the people from paper and nettle fibers. Her officials scoured the country for copper and brass implements, when the stock of copper for munitions was depleted, and gleaned a surprising amount of metal for military use. Her military leaders systematically looted the districts which they occupied. There are limits, however, to the achievements of the most scientific synthetic chemistry, or of the most unscrupulous and efficient administration. A substitute (*Ersatz*) was provided for almost everything, as the supply of the original good ran low. However successfully the substitute might imitate the original in appearance it rarely proved to have the same efficiency in action. German locomotives deteriorated because they were lubricated with substitute oils and grease; the German people ran down in vigor and power of resistance because they were fed and clothed with substitutes.

757. Commerce of Germany during the war. — Germany maintained active commercial relations with the other Central Powers, importing particularly foodstuffs from the rich plain of the Danube basin, and lignite (brown-coal) from Bohemia. Trade with the more distant allies, Bulgaria and Turkey, proved difficult and relatively unimportant. Railroad facilities were in such demand for the transfer of troops and the movement of munitions to the front, that they could hardly be spared for distant service in southeastern Europe; water carriage on the Danube was preferred but was slow and ineffective.

There was a marked increase in the value of trade with neutral states, of which three, Switzerland, Netherland and Denmark, were directly adjacent, while Norway and Sweden were separated only by water which lay outside the control of navies of the Entente. These states accounted for about one-seventh (14 %) of the total trade of Germany in 1913, and took on a new importance when Germany was denied other sources from which to supply her wants. The German government has not supplied statistics by which to measure changes in trade during the war, but they can be traced in the commercial statistics of the neutral states, and are illustrated in the following table.

Foreign Trade of Denmark, 1913–1919

(*Values in million crowns; crown equals $.27*)

	Total imports	Imports from Germany	Total domestic exports	Domestic exports to Germany	Total foreign exports	Foreign exports to Germany
1913	855	328	637	159	84	20
1914	795	265	780	275	87	26
1915	1,157	200	979	436	150	50
1916	1,357	265	1,177	653	132	38
1917	1,082	237	968	482	97	6
1918	946	316	710	307	48	1
1919	2,605	335	740	187	268	79

A feature of the table which deserves particular attention is the relatively small amount of foreign wares which reached Germany through Denmark. Doubtless wares of this kind were smuggled across the border in considerable quantities, and so do not appear in the statistics; but the strictness with which England, in behalf of the Entente, regulated the importation of these wares by the neutral countries, allowed no large surplus for export to Germany, and strangled the overseas trade of that country.

Germany imported from all these neutral countries foodstuffs, especially meat and fats; from particular countries she imported iron ore, metals, and special textiles for military purposes. Payment was made largely in coal and iron products, for which the small states had been used to rely on Germany, and which they sorely needed.

758. Effects of the political revolution. — Sections above enumerated various losses which Germany suffered as a result of the war. To appreciate the condition and prospects of the country after 1918 it is necessary to consider another element of weakness, of which the importance cannot be questioned, even though it may be hard to estimate. This is, namely, the political revolution which accompanied the armistice.

All the faults of the military monarchy of the Hohenzollerns appeared prominently in the outbreak and in the conduct of the war. The world paid a tremendous price to be rid of it, and did not count the cost. The evils inherent in the old political system should not be allowed, however, to blind our eyes to some merits that it had, notably its honest and efficient administration. They should not obscure the important fact that the old system, however bad it might be, was that to which the German people were used, and without which they were at a loss. The monarchical system was deep-rooted in German life. Most of the people accepted it with sincere conviction; the opposition to it, as exemplified in the party of the Social Democrats, was perfunctory rather than popular. In reliance on the monarchy the people had been content to retain a passive attitude; they lacked a sense of individual political responsibility, and lacked political initiative. When, therefore, the people realized at last that their trust had been misplaced, that the war which was to be over (so they had been assured at its beginning) by Christmas, 1914, was never to be ended until they had confessed to utter defeat, they swept away the old system but did not know how to operate the political machine which they erected in its place. Attempts at social revolution by the radical Spartacists, infected by Russian doctrines, and at reaction by adherents of the old military monarchy, rendered the new republic insecure at its foundations; while the desperate conditions of life prevailing at the close of the war shattered the former administrative organization and rendered the new administration costly and ineffective.

759. Peculiar importance to Germany of sound politics. — A decline in political efficiency will have a more serious effect on the productive organization in Germany than it would have in other countries for two reasons. (1). The state has taken a particularly active part in the control of economic affairs. Its power over them was greatly extended in the course of the war, and is still so great that much depends on the wise exercise of this power. (2). The state will transmit to the people by taxation the burden of paying reparations. This burden will be and ought to be a heavy one. The minimum amount to be paid annually, under the terms of the London Settlement of 1921, is variously estimated by German economists to amount to 8 or 16 or 28 per cent of the total real income of the country. The proportion, if we choose the middle figure, does not seem unduly high. Many, perhaps most, American families could sacrifice one-sixth of their income, and still retain the essentials of health and happiness. Conditions were very different in Germany at the close of the war. A considerable part of the people was on a stage of living which may fairly be termed a minimum; depression below that stage implied an actual loss in productive efficiency. Under these conditions it was of peculiar importance that the tax system should be just in principle, economical and impartial in administration. No slight importance, therefore, attaches to the fact that the government even in 1921, three years after the armistice, was still unable to balance its budget, and was meeting its domestic obligations by issuing more and more paper money, a tax which in the long run is of all taxing devices the least effective and in its immediate effects is the most iniquitous.

760. Dismemberment of Austria-Hungary. — Some time before the end of the war, while the power of resistance in Germany still was strong, Austria-Hungary gave evidence of distress. The state had been held together by the military dominance of a minority, and as the end of the war approached and the failure of the military party was evident, the state dissolved into its component parts by a natural process quite independent of any action of the Entente.

Fragments of the old dual monarchy were absorbed by bordering countries. Galicia, the great crescent-shaped province lying to the east of the Carpathian mountains, went to the new state of Poland. It had been grievously ravaged in the course of the war, but promised to develop in time considerable agricultural resources, and was particularly prized for its supply of petroleum in the east and the coal mines of the Teschen district attached to it in the west. Transylvania, with parts of some adjacent provinces, brought to Rumania an area rich in forest products, with some mineral resources and some fertile grain land (Banat of Temesvar). Rumania became by these accessions and by the acquisition of Bessarabia, on the Russian border, one of the larger states of Europe, with a population (about 16 million) double that of Jugo-Slavia, the next largest state in the Balkan peninsula. This new state grew out of the old Kingdom of Serbia, in which the World War began, and which was finally rewarded for its sufferings in the war by union with the kindred people along the Adriatic coast and in the southwest of the old dual monarchy. The trials of Jugo-Slavia were not ended with the war, for it had still to make good its claims to Fiume, its natural outlet at the head of the Adriatic.

The justice of its claims were not, in the opinion of the writer, open to serious dispute, but Italy, which had already pushed its Alpine frontier far past the Austrian districts occupied by an Italian population, was jealous of a possible rival in the Adriatic, and refused to agree to the occupation of Fiume by another power. The unfortunate exploits of the Italian bravado, D'Annunzio, complicated the issue, but it was at least settled by a compromise between the two powers which promised in the course of time to give Jugo-Slavia the commercial outlet essential to its prosperity.

761. Czecho-Slovakia. — Of the new states formed within the boundaries of Austria-Hungary that which gave the greatest promise of prosperity was Czecho-Slovakia, comprising the old kingdoms of Bohemia and Moravia, and extending to the southeast to include the Slovak population which had formerly been included in the kingdom of Hungary. This new state took that part of the old monarchy which was most richly endowed with natural resources and which had attained the highest industrial development. Stating the proportions approximately it included only one-fifth of the area of Austria-Hungary, but in that fraction comprised one-third of the factory workers and over one-third of the mining population. The land was fertile and highly cultivated, supporting a dense population and providing a surplus of food for export. The Czechs could look back with pride to a period in the past when they were one of the leading peoples of Europe, and they had prepared themselves for self-government by long struggles against the oppressions of German rulers.

Although Czecho-Slovakia is far distant from the sea it has means of access to it both by the Elbe and by the Danube, and is at the heart of the railroad system of central Europe. Provided with a surplus of products keenly desired in neighboring states, particularly coal, iron and food, its commercial future appears to be assured.

762. Magyar Hungary; German Austria. — Far less favorable was the condition of the two states, Austria and Hungary, which had been the seat of the power of the Hapsburgs in the past, and which had prospered when they had been supported by the labor of subject peoples, but which were now shorn of this support, and given each its own way to make in the world.

The Magyar state of Hungary offered at least tolerable prospects of success. Although it lost the border lands which had formerly supplied practically all its forest products and much of its minerals, it retained a compact and fertile territory, one of the granaries of central Europe, and could hope to exchange its surplus wheat for the products which it needed.

German Austria was left by the terms of peace in a pitiable condition. It retained a population of only 6 million, including less than half of the German-speaking people in the old dual monarchy. Of this total nearly one-third (1.8 million, 1920) was comprised in the single city of Vienna, which had grown to this size largely by the political advantage that it enjoyed as one of the capitals of a great state. Much of the area of the new state was mountainous, suited to grazing but not adapted to intensive agriculture. Before 1914 the territory of the present state was able to produce perhaps two-thirds of the necessary food supplies consumed by its inhabitants; in 1920, with powers depleted by the war, it could render only one-quarter. Endowed with only one mineral resource, iron mines in Styria, Austria could buy the food required for the maintenance of life only by the exchange of industrial products made with imported coal out of imported raw materials. At the close of the war the situation of the country was indeed desperate, for the people had no resource with which to make a start in the process of foreign trade. Gradually markets were opened, and some basis of credit was found for the beginning of commercial transactions, but meanwhile the government had plunged deep in the issue of paper money, which depreciated so far that itself formed a grave obstacle to economic recovery. Austria seemed destined for years to come to rely upon charity, whether private, public or international; and many questioned the wisdom of the peace settlement which forbade the union of this fragment of the German-speaking people with the rest of Germany.

763. Poland; earlier history. — The World War made its greatest change in the map of Europe not by the transfers of territory between bordering states, important as these were to the parties concerned, not by the creation of new states like Czecho-Slovakia but by the resurrection of an old state, Poland. Poland had played no great part in commerce in the previous period of its existence. The surplus supplies of wheat grown on the great estates of its landlords had been carried by road and river to Danzig, to be shipped to western Europe in exchange for metals, manufactured wares and exotic products that made the life of the Polish nobleman more comfortable. The country as a whole was too backward and too far removed from the centers of European progress to become an important member of the commercial system of the time.

The partitions of Poland at the end of the eighteenth century keenly as they were felt by patriots, made little difference in the life of the mass of the people The divided people went their separate ways: neglected by Austria, schooled and drilled by Prussia, given in Russia at least access to an enormous market which was later to be a great stimulus to manufacture. Most of the people were employed in agriculture under a system of serfdom like the medieval. They were freed from this in the nineteenth century, and acquired in small holdings much of the land which had formerly been held in great estates. A turning point in the economic history of the Polish people came in the last quarter of the nineteenth century, when manufactures developed rapidly in Russian Poland, fostered by the high protective tariff.

764. Resources of the new Poland. — The new state of Poland was welcomed and supported by the Entente as a check on Germany. With a population of about 25 million it had claim to a place among the larger powers of Europe. Its economic endowment was adequate if not abundant; besides a sufficiency of arable land and great forests it had coal supplies comparable in amount to those of France, the oil of Galicia, and other mineral resources. Its gravest lack was that of experience in organization, group-action, both in economics and in politics. In manufactures the Poles have looked to Jews and Germans for leadership; the Poles have supplied labor, but have only by exception taken a place among those responsible for control. Their manufactures showed a high labor cost and heavy capital charge per unit of product. Behind the barrier of the Russian tariff they prospered. They could doubtless be maintained for the supply of domestic needs by protection, but they have shown slight capacity to win in the world market the opening which was formerly afforded to them by Russia.

765. Prospects of Poland. — In the field of politics, as in economic affairs, the Poles have yet to prove their mastery of the complicated problems that arise in the organization of a modern great state. In the years following the armistice that closed the war they showed a readiness for military adventure that boded ill for the future of a country needing all its resources for economic reconstruction. They soon contracted a heavy debt, by the accumulation of huge deficits in the budget and the endeavor to pay their way by printing paper money. The Polish mark, nominally equal to the German and therefore worth about $.24, declined to a point (Sept., 1921) at which 6,700 were exchanged for the American dollar. The position of Poland is difficult at best, and the prospects of the new state will be seriously impaired if a more sober spirit does not prevail in the national councils.

766. Russia and the revolution of 1917. — From the beginning of the war southern Russia was cut off from commercial contact with the Entente by the closing of the straits leading into the Black Sea. In the north the Baltic was likewise closed. Contact was maintained only on Russia's Arctic coast, and by the Siberian railroad. Means of access by both routes were difficult and expensive; the exchange of products was restricted to those that served imperative military needs.

Since the Russian-Japanese war of 1904 the forces of revolution had been gathering in Russia. The World War brought these to an explosion by the sufferings that it imposed upon the people and by the exposure that it made of the weakness and corruption of the autocratic government. In March, 1917, an outbreak at Petrograd initiated a revolution that in six months ran through nearly as many stages, tending always in a radical direction and leaving the government finally in the control of the Communist or Bolshevik party.

767. Soviets and Bolsheviks. — In the earlier stages of the revolution great influence was exercised by *soviets*, councils, formed on a democratic basis to represent workers in factories, peasants and soldiers, against the traditional leaders of the old régime. The soviets were features of a world-wide popular movement, which found their counterpart in the shop-councils of England and of the United States. The close of the war left the future of this movement still in doubt, but it appeared to offer a wholesome and welcome change in industrial relations, provided the workers were willing to accept responsibilities corresponding to the powers that they claimed. It is important to an understanding of the Russian revolution to realize that the democratic features of the soviet system were soon abandoned. The Bolsheviks counted less than a million in a population of 120 million; they numbered certainly less than 2 per cent of the adult population. By their boldness and vigor they dominated the situation, and while they maintained the pretence of deferring to the popular will they acted as tyranically and unscrupulously as the autocracy which had preceded them.

768. Difficulties of the Bolsheviks. — The Bolsheviks accepted as gospel the economic doctrines of Karl Marx, the founder of modern socialism, and many enthusiasts for social experiments ("parlor-Bolsheviks") have expressed regret that they did not have a better field in which to try out these doctrines. Russia was already war-worn to desperation when the revolution took place. Fighting continued, not alone on the external front but now also in civil conflicts which ravaged the face of the country. The states of the Entente found not merely that they had lost an ally, but also that a new enemy to them had arisen, preaching doctrines subversive of the established order and threatening to undermine their power when the struggle with Germany was at its height. They stimulated in Russia opposition to the rule of the Bolsheviks, and sought so far as they were able to seal Bolshevik Russia in isolation lest it profit by the exchange of goods, and spread its doctrines.

769. Failure of Bolshevist communism. — Under the conditions Bolshevism was a disastrous failure. Curiously enough it showed its greatest efficiency in the field of military affairs. In its own particular department, the production and distribution of economic goods, it brought Russia to destitution. Fixed capital inherited from the old order wore out and was not replaced. Railroads and factories ceased to function properly, not only because of depreciation of equipment but also because of a decline in the efficiency of laborers. The yield of agriculture declined so far that a large part of the population was threatened with the starvation that visited whole provinces. Pretensions to forms of social service which other governments did not render were too often found on critical examination to be mere shams; they certainly counted for nothing over against the gross neglect to provide for the elementary needs of the people.

770. Prospects of Russia. — Years after it had begun the Russian revolution was still in process of development, and promised to disturb the life of the people for years to come. By 1921 communism was a recognized failure, but the lines that would be followed in the re-establishment of society on the basis of private property defied prediction. Of this we may be sure, that for decades, perhaps for a generation following the war, Russia will count for little in the history of commerce. Little by little its economic structure will be reorganized. The leaders in the process will be private individuals from other countries, including probably a large proportion of Germans. The process will be slow because it will be retarded by political instability. Russia can hardly be divided into parts; Russia can hardly be governed as a whole. Economic recovery will be a tedious and painful process because it must wait upon the political education of a people who in 1914 had made but the barest beginnings in national self-government.

QUESTIONS AND TOPICS

1. Territorial losses of Germany in the peace settlement. [Haskins in What really happened, etc., chap. 3; Bowman, chap. 10.]

2. Effect of the blockade on Germany. [A. E. Taylor in American World's Work, Oct., 1919, 38: 590–600; W. J. Ashley in Quart. Rev., Oct., 1915, 224: 444 ff.]

3. German war finance. [W. S. Ford in Fortnightly Rev., Apr., 1919, 111: 616–624.]

4. The new government in Germany. [W. J. Shepard in Amer. Polit. Sci. Rev., Aug., 1919, 13: 361–378.]

5. Partition of Austria-Hungary. [Seymour in What really happened, etc., chap. 5.]

6. The enlarged state of Rumania. [Bowman, chap. 15.]

7. Jugo-Slavia. [Bowman, chap. 14.]

8. Problem of Fiume and the Adriatic. [Johnson in What really happened, etc., chap. 6.]

9. Czecho-Slovakia. [Bowman, chap. 13; M. O. Williams in Nat. Geog. Magazine, Feb., 1921, 39: 111–156.]

10. The new Hungary. [Bowman, chap. 12.]

11. The republic of Austria. [Bowman, chap. 11; Fortnightly Review, April, 1919, 111: 625–635; S. Hoare in Nineteenth Century, 1920, 87: 409–423.]

12. The resurrection of Poland. [Lord in What really happened, etc., chap. 4; in Haskins and Lord, Some problems, chap. 5.]

13. Problems of the new Poland. [Bowman, chap. 19.]

14. Agriculture and landownership in Poland. [Arctowski, Geog. Rev., Apr., 1921, 11: 161–171.]

15. Elements in the Russian revolution. [Sir S. Buchanan in Fortnightly Rev., 1918, 110: 819 ff.; P. Vinogradoff in Quarterly Review, July, 1917, 228: 184–200.]

16. The Soviets. [Spargo, chap. 2, 3.]

17. The land question and the revolution. [Spargo, chap. 5.]

18. Industry under the Soviets. [Spargo, chap. 8.]

19. Nationalization of industry. [Spargo, chap. 9, 10.]

BIBLIOGRAPHY

The German government supplied no official statistics of trade during the period of the war, and the student is obliged to look to the publications of other governments for information. C. D. Snow and J. J. Kral, * German trade and the war, Washington, 1918, Bureau of For. and Dom. Commerce, Misc. Series no. 65, will be found a convenient compilation; this covers trade, manufacture, raw materials and substitutes, cartels, labor, finance, etc.

References to the effect of the peace settlement on the interests of Germany and Austria-Hungary will be found in the Questions and topics, and in the bibliography of the preceding chapter.

Literature on the new states in central and eastern Europe is mainly in foreign languages; readers of English have to depend on accounts in annual encyclopedias, on statistics gathered in annuals such as the Statesman's Year Book, and on reports of American and English consular agents. On Poland the reader may consult a brief encyclopedic account edited in the English version by E. Piltz, entitled * Poland; her people, history, industries, etc., London, 1916; A. B. Boswell, Poland and the Poles, N. Y., 1919; and an elaborate study on The Polish peasant in Europe and America, by W. S. Thomas and F. Znaniecki, in 5 volumes, Chicago 1918, Boston 1919–1920.

On the Russian revolution John Spargo, ** The greatest failure in all history, N. Y., 1920, can be recommended as a book filled with facts, which has in general stood well the criticism of those inclined to favor the Bolsheviks. The failure of Bolshevism is amply evidenced by the writings of honest partisans of the revolution, such as Albert H. Williams, Lenin, N. Y., 1919; Arthur Ransome, The crisis in Russia, London, 1921; C. L. Malone, The Russian republic, N. Y., 1920; Bertrand Russell, The practice and theory of Bolshevism, London, 1920. Maurice G. Hindus, * The Russian peasant and the revolution, N. Y., 1920, gives a good account of the agrarian question, and a questionnaire prepared from documentary material by the International Bureau of Labor, entitled in the English version Labour conditions in Soviet Russia, London, 1920, throws much light on the industrial conditions.

CHAPTER LVIII

THE UNITED STATES, 1914–1920

771. Statistics of American Commerce, 1914–1920. — The course of the commerce of the United States during the war and the few years of peace immediately following appears in the statistics of the accompanying table, in which, for reasons that will appear later, the movement both of merchandise and of specie is indicated.

TRADE OF UNITED STATES, 1914–1920

(Values in millions of dollars; calendar years, ending Dec. 31) *

	Merchandise			Gold		Silver	Price level
	Imports	Exports	Excess of exports	Excess of exports	Excess of imports	Excess of exports	
1914	1,789	2,114	324	165	. . .	26	100
1915	1,779	3,555	1,776	. . .	421	19	101
1916	2,392	5,483	3,091	. . .	530	38	124
1917	2,952	6,226	3,274	. . .	181	31	176
1918	3,031	6,149	3,118	. . .	21	181	196
1919	3,904	7,920	4,016	292	. . .	150	212
1920	5,279	8,228	2,949	. . .	107	26	243
Total	21,127	39,675	18,548	457	1,259	471	. . .

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* The table is taken from Report of Comptroller of the Currency, 1920, vol. 1, p. 14, a convenient source because both merchandise and specie are enumerated by calendar, not fiscal year. I have corrected the table by reducing by 1 milliard the figure for exports in 1914, to accord with verified commercial statistics, and have altered the figures of excess of exports in 1914, and for total exports and total excess to accord with this correction. The student who checks the figures by reference to U. S. Statistical Abstract, 1920, p. 773, should not be dismayed by finding there the exports for 1915 listed at 2,555 millions; it is another example of a milliard dollar error.

772. Interpretation of the Statistics. — With the figures of this table should be compared those given in section 663, covering the course of trade from 1860 to 1913. Attending only to the figures giving the value of merchandise the reader will note that the imports in the early years of the war remained about at their former level, that they increased in the latter part of the war, and particularly after its close. The exports, on the other hand, showed the effect of the war almost from its beginning. They had first exceeded 1 milliard dollars in 1896, and had grown steadily with the growth of population and with the rise in prices due to the increase in gold output, passing the mark of 2 milliards in 1911. From that level they now shot up to 3, 4, 5, 6, 6, 8, 8 milliards in the individual years; history does not provide another example of such prodigious growth. As a result the excess value of exports over imports, which had in recent years been about half a milliard, grew to 1, 2, 3, even 4 milliard dollars a year.

Part of the increase in the value, both of imports and of exports, was of course due to the rise in prices which accompanied the war. To enable the student to make the necessary correction for this factor a column of the table supplies the "index-number" of the Department of Labor, showing what the average wholesale prices were in any year compared with the years 1913–1914. Evidently if prices in 1918–1919 were double what they had been just before the war, the figures for the value of trade in those years should be divided by 2 to give an idea of the actual quantities of goods exchanged. Applying this process of correction the student will note that the volume of imports actually shrank in the course of the war, but that the exports, in spite of this process of reduction, reached a level which had not before been dreamed of. In fact the figures for exports in 1918 and for parts of 1917 and 1919 do not take account of the great quantities of stores shipped from the country in transports of the government, and therefore not reported to the customs officials; the figures should be raised by perhaps one-third to give a comprehensive idea of the total quantity of goods sent out in that period of greatest national exertion.

773. Increase in value of exports to Europe. — Not only did the thoughts of the whole world center in Europe during the war; the wares of the world flowed thither, in unexampled volume, to be used to destroy and to be destroyed. For reasons already given the European belligerents cut down their exports, and strove so far as they could to increase the volume of their imports. The United States was in the reverse position. While it was still neutral, and likewise after it entered the war (April, 1917), it was the great source from which the European states supplied the needs which they had not time or strength to supply themselves. Although the larger part of central and of eastern Europe was cut off by the blockade and by the difficulties of transportation, the exports of the United States to Europe, which before the war had run a little over 1 milliard, increased to 2, 3 and 4 milliards. In the first full year of peace, 1919, when the larger part of Europe was again open to trade, and the exhausted peoples were endeavoring to restock, the value of exports to Europe exceeded 5 milliard dollars in value.

774. Increase in value of exports to other continents. — The figures of the preceding section give, however, but a partial and misleading idea of the peculiar position which the United States assumed in the economy of the world during the war. In spite of the great increase in value, and increase in quantity, of exports to Europe, the *proportion* of the total exports which went to Europe rose very little. As shown above (sect. 708), the United States had tended, in the years before the war, to distribute its exports more widely. The proportion which exports to Europe formed of the total dropped from four-fifths in the '80's to three-quarters about 1900, then to two-thirds; in 1913 the proportion was 60 per cent.

The figures for the war period were 71, 69, 69, 63; in 1920 the figures dropped to 54. It is apparent that there was a great expansion of exports in this period, not only to Europe but to other parts of the world as well.

To understand this situation we must remember that the United States had not only to meet the demands of the emergency in Europe, but also had to take the place of the great industrial states of Europe in meeting the demands of the rest of the world. England, Germany, and France were unable to sell goods in their usual markets, and the United States for the time took over their old customers.

775. Statistics of distribution of exports. — Exports from the United States, therefore, increased greatly in value, not only to Europe but also to other continents. The following table indicates the distribution of exports in the period of the war; Oceania and Africa, taking together five per cent or less of American exports, are omitted.

EXPORTS OF THE UNITED STATES, IN MILLIONS OF DOLLARS, TO

	Europe	North America	South America	Asia
1914	1,486	529	125	113
1915	1,971	477	99	114
1916	2,999	733	180	279
1917	4,325	1,164	259	380
1918	3,732	1,236	315	447
1919 *	5,188	1,296	442	701
1920 *	4,466	1,929	624	772

* Calendar years; 1914–1918 fiscal years ending June 30.

The distribution of American exports in Europe has already been described. Of the countries grouped under the heading North America, Canada accounted for rather more than half of the total; Cuba and Mexico also bought greatly increased amounts of the exports of the United States. In South America, Argentina, Brazil, and Chile increased their purchases three- or four-fold; in Asia, Japan raised the value of its purchases from about 50 to over 300 million dollars.

776. Changes in the composition of exports. — This expansion was shared unequally by the different groups of commodities which together made up the total exports. Raw materials for manufacture declined in importance; before the war they had accounted for about one-third of the total exports, but by 1917 they made up only about one-eighth. On the other hand there was a great increase in the export of foodstuffs. The United States had tended in the period immediately preceding the war to consume an ever-increasing proportion of the foodstuffs that it produced. The export of foodstuffs, raw and manufactured, had declined to about 500 million dollars in the years 1910–1913. In the early years of the war it rose to about 1 milliard; in 1918 it amounted to almost 2 milliards, and in the first two years of peace it exceeded that figure.

That part of American trade which showed the most extraordinary expansion was the export of manufactures. Before the war the value of finished manufactures exported had averaged about 700 million. In 1915 the figure exceeded 1 milliard; in 1916 and succeeding years, 2 milliards; in 1920, 3 milliards. The growth was particularly noticeable in trade with non-industrial countries, which had previously relied in large part on Europe for manufactured wares and found now the supply from that source cut off. Exports of manufactures from the United States to Asia, South America, and Africa increased about five-fold, comparing the years 1914 and 1920. Exports of manufactures increased even to Europe, including such important items as railroad supplies, agricultural implements, machinery, petroleum products, etc.; and it was estimated that in 1920 the United States was supplying one-third of the total demand for manufactured wares in the trade of the world.

777. Effect of the war upon the import trade. — The United States made its commercial contribution to the World War, as has already been said, by following a course which was the reverse of that of the European belligerents; it expanded its exports, and restricted its imports. Of necessity it renounced a very large part of that trade which had been the greatest source of supply, the trade in imports from Europe.

Before the war Europe supplied about half of our needs (49 per cent of total value of imports, 1913). In the last year of the war imports from Europe amounted to less than one-seventh of the total (14 per cent in the year ending June 30, 1918). The varied manufactures which we had been used to import from the industrial states of western Europe were no longer in the market. Many of these wares were luxuries appealing indeed to the taste of the consumer, but not involving any serious economic consequences when the supply failed. Others, notably the chemicals and the special kinds of glass and porcelain which had previously been imported from Germany, played an important part in industrial processes, and had if possible to be replaced. American manufacturers entered a field which the Germans had long regarded as their own peculiar province, and which, indeed, they would probably have long continued to dominate if they had not broken the peace.

Forced to an extension and diversification of industry by the demands not only of the American but also of many foreign consumers, the country imported an increased proportion of crude materials for use in manufacturing as the proportion of finished manufactures ready for consumption declined. Raw wool, raw silk, crude rubber and items of that character rose toward the top of the list of wares imported, and gave a new importance to the trade with South America and Asia.

778. The excess value of exports over imports. — The war led, for reasons already given, to an enormous increase in the excess value of exports over imports. The table at the beginning of the chapter presents figures which were without parallel in the history of this, or indeed of any other country: an annual excess in the years 1915–1920 averaging over 3 milliard dollars a year, a total excess for the period 1914–1920 amounting to 18.5 milliards. The following table shows how unequal was our balance in trade with the different continents, and indicates the close connection of the great excess of exports with the European war.

BALANCE OF TRADE IN MERCHANDISE OF UNITED STATES, 1913–1920

(Calendar years; figures in millions of dollars, giving excess value of imports, [–], or of exports, [+], of the U. S.)

	Europe	North America	South America	Asia	Oceania	Africa
1913........	+635	+211	– 52	–155	+47	+5
1914........	+556	+ 40	–139	–168	+29	+6
1915........	+2,027	+ 49	–178	–156	+31	+3
1916........	+3,180	+266	–207	–152	+12	–8
1917........	+3,511	+389	–287	–327	+16	–27
1918........	+3,541	+351	–308	–408	–31	–26
1919........	+4,437	+138	–246	–340	+41	–14
1920........	+3,238	+266	–137	–512	+78	+15

Taking Europe alone the excess of exports to the credit of the United States was over 20 milliards in the years 1914–1920. North America was the only other continent showing a large "favorable" balance, and Canada was the single country that accounted for most of this. The balance in trade with South America and with Asia was against the United States, as had been usual in the past, but to an extent which passed the bounds of any previous experience.

779. Items in the international balance before the war. — In approaching the subject of the balance of trade of the United States during the war it is desirable to have in mind the most important items which, before 1914, constituted the international credits and debits of the country. The table below pictures these items in the form of a simple balance sheet, as they were estimated in 1910.* The figures are given in round sums, indicating that they make no pretence to statistical accuracy; they are to be understood merely as showing the tendency of a normal year. In the case of several items no attempt is made to do more than indicate the net balance that might be expected, year in and year out.

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* I have adapted the figures from the report of George Paish to the National Monetary Commission, 61st Congress, 2d session, Senate Document No. 579, pp. 153–213.

International Balance of the United States Before the War

(Figures in millions of dollars)

	Credit	Debit	Balance	
			Credit	Debit
Merchandise	2,000	1,500	500	...
Bullion	....	....	30	...
Freight, etc.	....	....	...	25
Remittances	....	....	...	150
Tourists	30	200	...	170
Interest and dividends	75	300	...	225
Investment	....	....	40	...
			570	570

780. Explanation of the "favorable" balance. — The most important feature of the table is the great credit item due to the excess of exports over imports. Ever since 1873, with rare exceptions (only four years altogether) the United States has shown a credit balance of this kind, a "favorable" balance as it was called in the days when people believed that it would bring precious metals into the country. Actually, the "favorable" balance implied nothing more than that we were a debtor country, bound to export more than we could import from the rest of the world, to meet our obligations. The character of these obligations is indicated in the column of debit balances. Foreigners did more ocean carriage for us than we did for them, and had a balance due to them on that account; the figure in the table would be considerably larger if the freight bill had not been partially offset by the considerable purchases of coal and stores made by foreign ships in our ports, which counted of course to the credit of the United States. The remittances of private persons, largely of immigrants to this country sent to agents or relatives in their old home, amounted to a surprisingly large aggregate. Funds would be remitted, say, by a postal money-order, but of course the foreign government that honored this order would look for payment to the American post-office, which would have to depend on our surplus of exports to meet the debt. So in the case of the other items, expenses of American travelers and the claims for interest and dividends of European investors, we were bound to make heavy payments, and made them by delivering our cotton, copper, petroleum products, and so on, to a value much exceeding the value of our imports.

781. Movement of specie in the period of the war. — Some part of the total exports of the war period was a free gift. The food, clothing, and medical supplies that were donated by private individuals, by associations, and by the government, demanded no commercial return and no acknowledgment of indebtedness from the foreigner. Large as were these gifts in absolute value, they can be omitted from consideration; they may have formed a considerable portion of a milliard and still be negligible. For most of the exports that appear in the commercial returns the foreigner had to pay in the present or promise to pay in the future.

One means of payment was hard cash. In the few years immediately preceding the outbreak of the war the European banks, nervous because of the political outlook, had been trying to build up their reserves, and had been drawing gold from the United States. In the single month of July, 1914, over $40,000,000 were shipped from New York. American bankers and business men owed at this time several hundred million dollars, maturing before the end of 1914; the city of New York owed $80,000,000. For a brief period sterling exchange rose far above the normal par; an American was willing to pay over $5 for the right to a pound sterling payable in London. Soon the tide set in the other direction. The total gold stock of the United States at the outbreak of the war was about 1.8 milliard dollars. In 1920 it was 2.7 milliard, roughly one third of the world's total stock of gold used for monetary purposes. In the interval the United States received from Europe over 1.2 milliard dollars in gold, of which it kept the larger part.

Reference to the table at the beginning of the chapter will show that silver flowed in the opposite direction. The United States as a silver-producing country, has had regularly a surplus to export, but parted with the very large sums appearing in the table in the years 1918–1919 as a means of liquidating part of the balance owed to Asia. The demand for silver to be shipped to the East was so strong that for a brief period the bullion in the silver dollar, which so recently as 1915 was worth only forty cents, was actually worth more than a dollar in gold.

782. Securities and loans. — Another means of payment employed by the peoples of Europe to meet the balance against them was the sale in the United States of American securities owned abroad. It is supposed that in the period 1914–1920 Americans repurchased 4 to 5 milliards in value of stocks and bonds that had been issued in the United States and held by foreigners. For example, of the common stock of the U. S. Steel Corporation 1,286,000 shares, over one-fourth of the total issue, were in 1914 held abroad. At the end of 1918 the number had dropped to 484,000, and in 1919 it declined still further.

American investors, furthermore, purchased several milliard dollars worth of foreign, mainly European securities, issued by governments, by municipalities, by railroads, and by business enterprises. Evidently the European, in debt to the American for the goods sent across the sea, could square the account by selling his stocks and bonds in this country and paying the proceeds to his creditor here.

Finally, and most important, the American government, after the entry into the war of the United States (April, 1917) took upon itself the task of financing the purchases made by associated European governments in this country, and advanced to them a sum amounting to nearly 10 milliards of dollars.

In July, 1921, the account stood as follows, including only the advances made under the Liberty Loan acts, and omitting considerable sums due to the United States for the sale of surplus war material and for grain supplied to impoverished districts.

(Figures in millions of dollars.)

United Kingdom	4,166
France	2,951
Italy	1,648
Belgium	348
Total of these items	9,113
Total including items omitted	9,435

783. Position of the United States as a creditor country. — Although it is not possible to describe with perfect precision the process by which the European peoples arranged to pay for the excess exports of the United States, the general situation is well enough known to warrant one conclusion of the greatest significance. The process resulted in turning the United States from a debtor country to a creditor country. Even if we disregard the 10 milliard loans made by the American government, and take account only of the investments made by private citizens in this country, it is apparent that the United States at the close of the war, instead of owing every year a balance to other countries on account of interest and dividends, was entitled to demand such a balance from abroad. So many items enter into the general international balance that this single one cannot be taken as determining the outcome, and deciding that after the war there would be in normal years an excess of imports over exports. The country will doubtless remain a debtor under some heads (private remittance, tourists). At the close of the war it certainly was not collecting interest and dividends in the form of an excess of imports, as the figures show. It continued to invest capital in foreign countries, particularly in Europe, in North America, and in South America; the capital value of the loans far exceeded any annual interest charge on them. Perhaps this process will continue in the period of reconstruction. So long as the flow of capital for investment in other countries exceeds the annual charges due from them, the surplus of exports (so far as determined by this one item) will continue. It is reasonable to believe, however, that sooner or later the tide will turn, and the United States will have, year in and year out, a surplus of imports over exports. The change will require a readjustment of ideas that have been fixed by generations of habit. Investors, demanding interest payments from foreign debtors, will no longer be able to maintain the attitude that imports menace the prosperity of the country and should be cut down by the restrictions of the tariff. Exporters will find that the current is set against them, and that they can broaden their market only as they stimulate still greater growth in the import trade. The American people will realize at last that, without a conscious exercise of their will, they have become a "world-power," and that in their own interest, quite apart from humanitarian motives, they must accept new responsibilities and take an active part in international affairs.

784. Shipbuilding before the war. An excess of imports into the United States, over the exports from this country, will come sooner and will be larger if the country resumes an important position in ocean shipping, as some believe it will. The United States continued, before the World War, to build shipping in considerable volume. The statistics of Lloyds Register show that in the first decade of the twentieth century, American shipyards contributed about one-seventh of the total tonnage built in the world. Most of the vessels built, however, were destined for service on the Great Lakes or in the coasting trade; the tonnage of steamers built for the foreign carrying trade was relatively unimportant. Foreign ships carried regularly about nine-tenths of our sea-borne trade in merchandise.

785. Shipbuilding by the American government. — In the first year of the war the tonnage of ships built actually declined. The provision of adequate cargo space became, however, a matter of urgent importance, as ships were drawn into service as transports and the ravages of the submarine extended. The government established in 1916 a Shipping Board, for the construction of ships as a public enterprise, and when it entered the war in 1917 it proposed to make one of its most important contributions to the war by the supply of new tonnage. The results are presented in the statistics of the accompanying table.

VESSELS BUILT IN THE UNITED STATES, 1914–1920

(*Figures in thousands of gross tons; fiscal years ending June thirtieth.*)

	Sailing	Steam	Total
1914	14	224	316
1915	8	142	225
1916	15	238	325
1917	43	461	664
1918	84	1,000	1,301
1919	79	3,107	3,327
1920	132	3,603	3,881

* Figures of total tonnage include gas vessels, canal boats and barges, not separately enumerated in the table.

786. American shipping at the close of the war — Comparing the figures of the table with the years of the war (and noting that each year of the table ends June 30, not Dec. 31) it is apparent that the contributions of the United States to relieve the dearth of shipping were of real importance in the last year of the war, but that the new industry developed slowly and reached its maximum of output only after peace had been declared. The peak of monthly production was attained in August, 1919, when about 400,000 tons of sea-going steel steamers were constructed. The sudden expansion of the industry, demanding the training of nearly a million men called from other occupations, was necessarily expensive. In three years, ending in 1920, the Shipping Board expended about 3 milliard dollars, a sum greater than the book value of the total shipping of the world in 1914. As a result of its activity the government owned about 8 million tons of ocean shipping. In the period of depression which followed the war fully half of this amount was idle, and the operation of ships by the government proved to be a losing venture. An act of 1920 directed that the ships be sold to private owners, but the close of the period left their future still in doubt.

787. Foreign exchange at the close of the war. — To understand the commercial position of the United States at the close of the war it is necessary to return again to questions of currency and foreign exchange. The situation appears in the following table.

AVERAGE ANNUAL RATE OF EXCHANGE IN NEW YORK

	1913	1919	1920
On London	100	90	75
On Paris	100	71	36
On Rome	100	56	26
On Berlin	100	7	7

The table signifies, for example, that the American in New York could buy in 1919 for $90 or in 1920 for $75 as many pounds sterling as had cost him $100 before the war; that he could pay a debt at Rome with half as many dollars in 1919, with a quarter as many dollars in 1920, as he would have had to pay in 1913. During the war the rate of exchange, like many other prices, was subject to government control; the figures for 1919 and 1920 show the tendency of the rates when they were left free to represent the actual value of the different currencies in international transactions.

788. Effect of depreciation in stimulating exports. — The table shows a great depreciation of the European currencies compared with the American. The United States had had a great expansion of bank credit during and after the war, but, after all, had in its enormous stock of gold the means to maintain the dollar on a gold basis, while the European countries had in circulation varying amounts of irredeemable paper. The reactions of this situation on international transactions were manifold, but two of them are worth particular attention.

When the issue of paper money continued, as in Germany for example, the value of the mark in foreign exchange fell more sharply than its purchasing power in the home market. An American importer would be able to buy more marks for the dollar. The mark would not buy as much as before in Germany, but the dollar's worth of marks would buy more than before; and the importer would find a transaction profitable which previously he would have been unable to undertake. Unequal depreciation of this kind acted as a stimulus or premium on exports from Germany, which was seriously felt by competing producers in other countries.

789. Effect upon the international money market. — The situation had also an important effect on the course of international loans. Let us assume for example the case of Brazil, desiring to place a loan abroad. If it borrowed in New York it would get gold dollars and would feel assured that when it came to repay the loan it would repay it in the same currency, with units of approximately equal value. If, on the other hand, it borrowed in London, in terms of pounds sterling, it would get paper pounds, at a discount in comparison with gold, but must look forward to repaying the loan with gold units if in the interval the English had succeeded in putting their currency on a gold basis and thereby bringing their exchange to par. Even if Brazil desired to make the loan for financing some expenditure in the European market it would do better to buy dollar credit in the first instance, and buy with that the foreign currency that it needed; and to accomplish this end it would be willing to pay higher rates in New York than in London. It would be hazardous to assert that as a result of the war New York will replace London as the world's money market, but it is clear that the position of London is seriously prejudiced so long as English currency is at a discount in comparison with gold.

QUESTIONS AND TOPICS

1. Chart the statistics of trade as in previous exercises.

2. Divide the figures of imports and exports by the figure for the price level of the year (1.01, 1.24, etc.,), so reducing values to the level of 1914, and enter results on chart with a dotted line that gives approximately *volume* of imports and exports.

3. What was the relative importance of foreign and of domestic trade in the United States in this period? [B. M. Anderson, in Annalist of N. Y. Times, Jan. 3, 1921, 17:9.]

4. What exports of the United States, (*a*) increased most in value, (*b*) increased most in quantity, in this period? [Statistical Abstract, 1920, Table of domestic exports, quantities and values, by years 1911–1920.]

5. What exports declined in quantity and in value? [Same].

6. Compare the exports from the United States to a particular country at the beginning and at the end of the war. [Use Bureau of Foreign and Domestic Commerce, Misc. Series, no. 38 and no. 106, Trade of U. S. with the world, 1914–15 and 1918–19. The student may, for example, take Argentina, Chile, Japan, or British India.]

7. Using sources given above, report upon the history of a particular import, or on the imports from a particular country, during the war.

8. How the dyestuffs crisis was met. [E. Hendrick in American World's Work, March, 1918, 35: 531–535.]

9. The problem of potash and nitrates. [F. P. Stockbridge in American World's Work, May, June, 1918, 36: 28–34, 191–197.]

10. The balance of international payments. [F. W. Taussig, Principles of Economics, vol. 1, chap. 33.]

11. The trade balance of the U. S. before the war. [G. Paish, reference in note to sect. 779.]

12. Probable tendencies in the trade balance of the U. S. [J. R. Smith, The American trade balance, National Foreign Trade Council, N. Y., 1919.]

13. Function of imports in our foreign trade. [G. E. Roberts, National City Bank, Foreign Commerce Series, no. 2, N. Y., 1920.]

14. American loans to Europe. [Noyes in Scribners' Magazine, 61: 131 ff.; Atwood in American World's Work, 33: 243–250, 399–403.]

15. Application of American methods to the construction of ships. [Hurley, chap. 5, 8.]

16. Concrete ships. [Mattox, chap. 13.]

17. Development of shipyards. [Hurley, chap. 6; Mattox, chap. 15.]

18. The shipping problem at the close of the war. [E. R. Johnson in Friedman, chap. 13.]

19. Foreign investments. [F. H. Sisson in Friedman, chap. 19.]

BIBLIOGRAPHY

In addition to sources previously cited see the Miscellaneous Series of the Bureau of Foreign and Domestic Commerce, numbers 15, 38, 63, 78, 106, etc., giving details of foreign trade by countries. On the subject of gold movement, foreign exchange and international finance reference must be made to reports of the Secretary of the Treasury, Director of the Mint, and Bulletins of the Federal Reserve Board. References given under chapter 54 are also applicable here. A monograph on Depreciated exchange and international trade was issued by the U. S. Tariff Commission, Washington, 1922.

The student should relate the history of commerce during the war to the military and political history of the period, and should have in mind the narrative as presented in general accounts such as those by Charles Seymour, ** Woodrow Wilson, 1921; J. S. Bassett, ** Our war with Germany, 1919; J. B. McMaster, * The U. S. in the World War, 1918; F. L. Paxson, * Recent history of U. S., 1921, chap. 44–56.

The most complete account of industrial and commercial activity organized for the conduct of war will be found in Benedict Crowell and R. F. Wilson, ** How America went to war, New Haven, Yale University Press, 1921, 6 vols.: The giant hand (mobilization and control of industry and natural resources); The road to France, 2 vols.; The armies of industry, 2 vols.; Demobilization. The subject of shipping is covered by E. N. Hurley, * The new merchant marine, N. Y., 1920, and W. C. Mattox, Building the emergency fleet, Cleveland, 1920. On the various problems of reconstruction see the symposium edited by E. M. Friedman, American problems of reconstruction, N. Y., 1918, and Isaac Lippincott, Problems of reconstruction, N. Y., 1919. Many special topics of commerce, industry and finance are treated in periodicals, in reports of banks (e.g., Foreign commerce series of National City Bank) and in government reports (e.g., dyestuffs in Bureau of For. and Dom. Commerce, Special Agents Series, numbers 96, 11, and 121).

TITLES OF BOOKS CITED BY ABBREVIATIONS

NOTE. — Books of which the full titles have already been given are not, in most cases, included in the following list, which is supplementary to the bibliographies and by no means a substitute for them. The list includes only titles of those books which have been cited so many times that a repetition of the full title would waste space, and which have been cited in so many different places that the reader's time would be wasted in hunting for the entry of the full title. I have thought it unnecessary to give full titles of standard narrative histories, of current manuals in the allied subjects of history and economics, and of local sources in the history of the United States.

Adams, Charles F., Jr. Railroads, their origin and problems. N. Y., no date.
Adams, George B. Civilization during the Middle Ages. N. Y., Scribner, 1894.
A. L. A. (American Library Association) Catalogue. Washington, 1904, and later editions.
American railway, The. N. Y., Scribner, 1897.
Armitage-Smith, G. The free-trade movement. London, 1898.
Ashley, William J., editor. British industries. London (N. Y., Longmans), 1903.
Ashley, William J. English economic history. N. Y., Longmans, 1892–3, 2 vol.
Ashley, William J. The Tariff problem. London, 1903.
Baring-Gould, Sabine. Story of Germany. N. Y., Putnam, 1886.
Bastable, C. F. Commerce of nations. N. Y., Scribner, 1899.
Beazley, C. R. Prince Henry the Navigator. N. Y., Putnam, 1895.
Beer, George L. Commercial policy of England toward the American colonies. N. Y., Macmillan, 1893, Columbia Studies, 3, II.
Beer, G. L. The old colonial system, 1660–1774. N. Y., 1912, 2 vol.
Bishop, J. Leander. History of American manufactures. Philadelphia, 1861–68. 3 vol.
Bourne, Edward G. Spain in America. N. Y., Harper, 1904.
Bourne, H. R. Fox. Romance of Trade. London, no date.
Bowker, R. R. and George Iles. Reader's guide in economic, social, and political science. N. Y., Putnam, 1891.
Bowley, Arthur L. England's foreign trade in the nineteenth century. London (N. Y., Scribner), 1893.

Bowman, Isaiah. The new world, problems in political geography. Yonkers-on-Hudson, 1921.

Bruce, Philip A. Economic history of Virginia. N. Y., Macmillan, 1896, 2 vol.

Bücher, Carl. Industrial evolution. N. Y., Holt, 1901.

Callender, G. S. Early transportation and banking enterprises of the States. Quarterly Journal of Economics, Boston, 1902–3, 17: 111–162.

Cambridge Modern history. N. Y., Macmillan, 1902 ff.

Carnegie History of domestic and foreign commerce of the United States, by Emory R. Johnson, T. W. Van Metre, G. G. Huebner, and D. S. Hanchett. Washington, 1915, 2 vol.

Chapman, S. J. History of trade between United Kingdom and U. S., London (N. Y., Scribner), 1899.

Chapman, Sydney J. Work and wages. London, Longmans, 1904–1914. 3 vol.

Cheyney, Edward P. European background of American history. N. Y., Harper, 1904.

Clapham, J. H. The economic development of France and Germany, 1815–1914. Cambridge, 1921.

Coman, Katharine. Industrial history of the U. S. N. Y., Macmillan, 1910.

Cornewall-Jones, R. J. British merchant service. London, 1898, 14s.

Cunningham, William. Growth of English industry and commerce. Cambridge (N. Y., Macmillan), 1896–1903, 2 vol. in 3.

Cunningham, William. Rise and decline of the free-trade movement. London, 1904.

DeBow, J. D. B. Industrial resources of the southern and western States. New Orleans, 1853, 3 vol.

Depew, Chauncey M., editor. One hundred years of American commerce. N. Y., 1895, 2 vol.

Edgar, William C. Story of a grain of wheat. N. Y., Appleton, 1903.

Fairlie, J. A. Economic effects of ship canals. Annals of Amer. Acad., Philadelphia, 1898, 11: 54–75.

Fisher, Sydney G. Men, women and manners in colonial times. Phila., 1898, 2 vol.

Fry, Henry. History of North Atlantic steam navigation. N. Y., Scribner, 1896.

Gastrell W. S. H. Our trade in the world. London, 1897.

Green, Mrs. J. R. Town life in the fifteenth century. N. Y., Macmillan, 1894, 2 vol.

Hadley, Arthur T. Railroad transportation. N. Y., Putnam, 1903.

Hammond, Matthew B. The cotton industry. Pub. Amer. Econ. Assoc., 1897, 2 series, no. 1. N. Y., Macmillan.

Hatfield, Henry R., editor. Lectures on commerce. Chicago, 1904.
Hewins, W. A. S. English trade and finance. London (N. Y., Scribner), 1892.
Hobson, John A. Evolution of modern capitalism. N. Y., Scribner, new ed., 1916.
Homans, J. Smith, editor. Cyclopedia of commerce. N. Y., Harper, 1858.
Hulbert, Archer B. Historic highways of America. Cleveland, 1902–5, 16 vol.
Hunter, William W. History of British India. London (N. Y., Longmans), 1899, 2 vol.
James, Edmund J. The canal and the railway. Pub. Amer. Econ. Assoc., 1890, 5:282–329.
Jeans, J. S. Waterways and water transport. London (N. Y., Spon), 1890.
Jessopp, Augustus. Coming of the friars. London, (N. Y., Putnam), 1889.
Jevons, W. S. The coal question. London, 2 ed., 1866.
Johnson, Emory R. American railway transportation. N. Y., Appleton, 1903 and later editions.
Jusserand, J. J. English wayfaring life. N. Y., Putnam, 1890.
Keller, Albert G. Colonization. Boston, 1908.
Lectures on British commerce, with preface by W. P. Reeves. London, 1912.
Levi, Leone. History of British commerce, 1763–1878. 2 ed., London, 1880.
Lindsay, W. S. History of merchant shipping. London, 1876, 4 vol.
Lippincott, Isaac. Economic development of the United States. N. Y., 1921.
Lord, Eleanor L. Industrial experiments in the British colonies. Bryn Mawr dissertation, 1896.
McCarthy, Justin. History of our own times. N. Y., Harper, 1901, 3 vol. and various other editions.
M'Culloch, J. R. Dictionary of commerce. Philadelphia, 1847, 2 vol.
Macgregor, John. Commercial statistics. 2 ed., London, 1850, 5 vol.
Macpherson, David. Annals of commerce. London, 1805, 4 vol.
Maginnis, A. J. The Atlantic ferry. N. Y., Macmillan, 1900.
Mahan, A. T. Influence of sea power upon history. Boston, Little, 1893.
Marvin, Winthrop L. The American merchant marine. N. Y., Scribner, 1902.
Mayo-Smith, Richmond, and E. R. A. Seligman. Commercial policy of the U. S., 1860–90. Leipzig, 1892, Schriften Ver. f. Soc., XLIX.

Mongredien, Augustus. History of the free-trade movement in England. London, Cassell, no date.

Morley, John. Life of Richard Cobden. London (N. Y., Macmillan), 1881, 2 vol.

Nicholson, J. S. History of the English corn laws. London, 1904.

Nicolls, W. J. Story of American coals. 2 ed., Philadelphia, Lippincott, 1904.

Ocean steamships. N. Y., Scribner, 1891.

Ogg, Frederic A. Economic development of modern Europe. N. Y., 1917.

Oxley, J. M. Romance of commerce. N. Y., Crowell, 1897.

Page, T. W. Earlier commercial policy of the U. S. Journal of Pol. Econ., Chicago, 1901–2, 10:161–192.

Palgrave, R. H. I. Dictionary of political economy. London (N. Y., Macmillan), 1894–99, 3 vol.

Porter, G. R. Progress of the nation. London, 1836 ff., 3 vol.; new ed., London, 1912.

Rand, Benjamin. Selections illustrating economic history, 4 ed., N. Y., Macmillan, 1903.

Report of a Committee of the Lords of the Privy Council on the trade of Great Britain with the U. S., 1791. Reprinted, Washington, 1888.

Ringwalt, J. L. Development of transportation systems in the U. S. Philadelphia, 1888.

Schmoller, Gustav. The mercantile system. N. Y., Macmillan, 1902.

Schooling, J. H. The British trade book. London, 4th issue, 1911.

Seebohm, Frederic. Era of the Protestant Revolution. N. Y., Longmans, 1903.

Seeley, J. B. Expansion of England. Boston, Little, 1900.

Seignobos, Charles. Political history of Europe since 1814. N. Y., Holt, 1899.

Seybert, Adam. Statistical annals. Philadelphia, 1818.

Shadwell, Arthur. Industrial efficiency. London, 1906, 2 vol.; new edition, 1 vol., 1909.

Social England, ed. by H. D. Traill and J. S. Mann. London (N. Y., Putnam), 1894 ff., 1901 ff., 6 vol.

Spears, John R. The story of the American merchant marine. N. Y., 1910, new ed., 1917.

Statesman's Year-Book. London (N. Y., Macmillan), annual.

Stephens, H. M. Story of Portugal. N. Y., Putnam, 1891.

Swank, J. M. History of the manufacture of iron. 2 ed., Philadelphia, 1892.

Taussig, Frank W. Tariff history of the U. S. N. Y., Putnam, 1897.

Vernon-Harcourt, L. F. Achievements in engineering. N. Y., Scribner, 1891.

Ward, T. H. editor, Reign of Queen Victoria. London, 1887, 2 vol.
Waterston, William. Cyclopedia of commerce. London, 1847.
Weeden, W. B. Economic and social history of New England. Boston, Houghton, 1890, 2 vol.
Wells, David A. Our merchant marine. N. Y., Putnam, 1890.
Wells, David A. Recent economic changes. N. Y., Appleton, 1898.
Williams, Ernest E. "Made in Germany," 5 ed., London, 1897.
Wilson, A. J. Resources of modern countries. London, 1878, 2 vol.
Wright, Carroll D. Industrial evolution of the U.S. N. Y., Scribner, 1895.
Zimmern, Helen. The Hansa towns. N.Y., Putnam, 1889.

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